

VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Aziz Nagar Gate, C.B. Post, Hyderabad - 500 075, Telangana.



Course Structure (R-25 Regulations)

Applicable from AY 2025-2026 Batch

B.Tech. in CSE (Data Science)



[Accredited by NAAC & NBA, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH Hyderabad]

B. Tech. in CSE (DATA SCIENCE)
Course Structure & Syllabus (R-25 Regulations)
 Applicable from AY 2025-2026 Batch

II YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1.		Probability & Statistics	3	0	0	3
2.		Discrete Mathematics	3	0	0	3
3.		Object Oriented Programming through Java	3	0	0	3
4.		Software Engineering	3	0	0	3
5.		Database Management Systems	3	0	0	3
6.		Computational Mathematics Lab	0	0	2	1
7.		Object Oriented Programming through Java Lab	0	0	2	1
8.		Software Engineering Lab	0	0	2	1
9.		Database Management Systems Lab	0	0	2	1
10.		Django	0	0	2	1
Total Credits			15	0	10	20

II YEAR II SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1.		Computer Organization and Architecture	3	0	0	3
2.		Operating Systems	3	0	0	3
3.		Algorithms Design and Analysis	3	0	0	3
4.		Computer Networks	3	0	0	3
5.		Machine Learning	3	0	0	3
6.		Innovation and Entrepreneurship	2	0	0	2
7.		Operating Systems Lab	0	0	2	1
8.		Computer Networks lab	0	0	2	1
9.		Machine Learning Lab	0	0	2	1
10.		Data Visualization- Power BI	0	0	2	1
11.		Indian Knowledge System	1	0	0	1
Total Credits			18	0	8	22

 Dr. KSRK Sarma	 Dr. A. Damodaram	 Dr. V. Vijaya Kumar	 Dr. P. V Subba Reddy	 Dr. T. C. A. P. Reddy
 Dr. Satish Balantrapu	 Md. Shafiuddin	 Dr. D. Aruna Kumari	 Dr. A. Obulesh	 Dr. N. Anusha
 Dr. RRS Ravi Kumar	 Dr. D. Babu Rao	 Dr. P. Sandhya	 Kishore K	R25 B.Tech. CSE (DS)



III YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1.		Predictive Analytics	3	0	0	3
2.		Full Stack Development	3	0	0	3
3.		Introduction to Data Science	3	0	0	3
4.		Professional Elective-I	3	0	0	3
5.		Open Elective-I	2	0	0	2
6.		Predictive Analytics Lab	0	0	2	1
7.		Full Stack Development Lab	0	0	2	1
8.		Data Science Lab	0	0	2	1
9.		Field Based Research Project	0	0	4	2
10.		UI Design –Flutter	0	0	2	1
11.		Gender Sensitization Lab*/ Human Values and Professional Ethics*	1	0	0	1
Total Credits			15	0	12	21

III YEAR II SEMESTER

S.No	Course Code	Course Title	L	T	P	Credits
1.		Data Stream Processing	3	0	0	3
2.		Big Data Technologies	3	0	0	3
3.		Business Economics and Financial Analysis	3	0	0	3
4.		Professional Elective-II	3	0	0	3
5.		Open Elective – II	2	0	0	2
6.		Data Stream Processing Lab	0	0	2	1
7.		Big Data Technologies Lab	0	0	2	1
8.		Exploratory Data Analysis Lab	0	0	2	1
9.		Advanced English Communication Skills Laboratory	0	0	2	1
10.		Prompt Engineering	0	0	2	1
11.		Environmental Science	1	0	0	1
Total Credits			14	0	10	20

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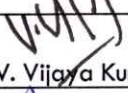
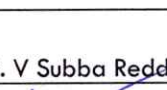
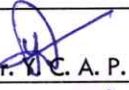











IV YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1		Data Stream Mining	3	0	0	3
2		Web and Social Media Analytics	3	0	0	3
3		Fundamentals of Management for Engineers	3	0	0	3
4		Professional Elective-III	3	0	0	3
5		Professional Elective – IV	3	0	0	3
6		Open Elective – III	2	0	0	2
7		Data Stream Mining Lab	0	0	2	1
8		Web and social media Analytics Lab	0	0	2	1
9		Industry Oriented Mini Project/ Summer Internship	0	0	4	2
		Total Credits	17	0	8	21

IV YEAR II SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1		Professional Elective – V	3	0	0	3
2		Professional Elective – VI	3	0	0	3
3		Project Work	0	0	28	14
		Total Credits	6	0	28	20

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PROFESSIONAL ELECTIVES
Professional Elective - I

	Software Testing Methodologies
	Adhoc & Sensor Networks
	Devops
	Distributed Systems

Professional Elective - II

	Blockchain Technology
	Software Project Management
	Vulnerability Assessment and Penetration Testing
	Generative AI

Professional Elective-III

	Computer Vision
	Social Media Mining
	Cryptography and Network Security
	Cloud Computing

Professional Elective-IV

	Augmented Reality & Virtual Reality
	Quantum Computing
	Robotic Process Automation
	Cyber Forensics

Professional Elective-V

	Nature Inspired Computing
	Internet of Things
	Mobile Application Development
	Human Computer Interaction

Professional Elective-VI

	High Performance Computing
	Edge Computing
	UI/UX design
	Distributed Databases

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