

VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

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



VIDYA JYOTHI
INSTITUTE OF TECHNOLOGY
AN AUTONOMOUS INSTITUTION

COURSE STRUCTURE

R-22

For

B. Tech (Computer Science and Engineering)

B. TECH FIRST YEAR COURSE STRUCTURE

B.Tech I Year I Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A221001	Mathematics-I (Linear Algebra and Calculus)	3	1	0	4.0
2	A221004	Engineering Chemistry	3	1	0	4.0
3	A221083	Engineering Chemistry Lab	0	0	2	1.0
4	A221202	Basic Electrical Engineering	2	0	0	2.0
5	A221281	Basic Electrical Engineering Lab	0	0	2	1.0
6	A221302	Engineering Graphics & Modelling	1	0	4	3.0
7	A221503	Elements of Computer Science & Engineering	0	0	2	1.0
8	A221502	Programming for Problem Solving	3	0	0	3.0
9	A221582	Programming for Problem Solving Lab	0	0	2	1.0
10		Induction Programme				
		Total	12	2	12	20

B.Tech I Year II Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A222005	Mathematics-II (Ordinary Differential Equations & Vector Calculus)	3	1	0	4.0
2	A222007	Applied Physics	3	1	0	4.0
3	A222085	Applied Physics Lab	0	0	3	1.5
4	A222008	English for Skill Enhancement	2	0	0	2.0
5	A222086	English Language & Communication Skills Lab	0	0	2	2.0
6	A222402	Electronic Devices and Circuits	2	0	0	2.0
7	A222583	Python Programming Lab	0	2	2	3.0
8	A222382	Engineering Work Shop	0	1	3	2.5
		Total	12	2	12	20

B. TECH SECOND YEAR COURSE STRUCTURE

B.Tech II Year I Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A223510	Mathematical Foundations of Computer Science	3	0	0	3
2	A223504	Data Structures	3	0	0	3
3	A223009	Probability & Statistics	3	1	0	4
4	A223505	Computer System Architecture	3	0	0	3
5	A223506	Database Management Systems	3	0	0	3
6	A223584	Data Structures Lab	0	0	2	1
7	A223585	Database Management Systems Lab	0	0	2	1
8	A223588	Skill development Course (Data Visualization - R Programming)	0	0	2	1
9	A223013	Quantitative Methods & Logical Reasoning	2	0	0	1
		Total	17	1	6	20

B.Tech II Year II Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A224511	Design & Analysis of Algorithms	3	0	0	3
2	A224512	Operating Systems	3	0	0	3
3	A224513	Object Oriented Programming through Java	3	0	0	3
4	A224514	Software Engineering	3	0	0	3
5	A224515	Introduction to Artificial Intelligence	2	0	0	2
6	A224591	Operating Systems Lab	0	0	2	1
7	A224592	Object Oriented Programming through Java Lab	0	0	2	1
8	A2245P1	Real-time Application Oriented Project	0	0	4	2
9	A224597	Skill Development Course on Node JS	0	0	2	1
10	A224014	Professional Communication	2	0	0	1
		Total	16	0	10	20

B. TECH THIRD YEAR COURSE STRUCTURE

B. Tech III Year I Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A225524	Formal Languages and Automata Theory	3	1	0	4
2	A225525	Computer Networks	3	1	0	4
3	A225526	Web technologies	3	0	0	3
4	A225527	Professional Elective-I DevOps	3	0	0	3
	A225528	Linux Programming	3	0	0	3
	A225529	Software Project Management	3	0	0	3
	A225530	Principles of Programming Languages	3	0	0	3
5	A225531	Open Elective I Basics of Operating Systems	3	0	0	3
	A225532	Core Java Programming	3	0	0	3
	A225533	Fundamentals of Computer Networks	3	0	0	3
6	A2255A0	Computer Networks Lab	0	0	2	1
7	A2255A1	Web technologies Lab	0	0	2	1
8	A2255A8	Skill Development Course (UI Designs-Flutter)	0	0	2	1
9	A225017	Gender Sensitization	2	0	0	0
		Total	17	2	6	20

B. Tech III Year II Semester

Sl. No	Course Category	Course Title	L	T	P	Credits
1	A226554	Data Warehousing and Data Mining	3	0	0	3
2	A226555	Complier Design	3	1	0	4
3	A22	Business Economics & Financial Analysis	3	0	0	3
4	A226556	Professional Elective-II Agile Methodologies	3	0	0	3
	A226557	Distributed Databases	3	0	0	3
	A226558	Object Oriented Analysis and Design	3	0	0	3
	A226559	Computer Vision	3	0	0	3
5	A226560	Open Elective-II Fundamentals of Database Management Systems	3	0	0	3
	A226561	Software Engineering Fundamentals	3	0	0	3
6	A2265B0	Data Warehousing and Data Mining Lab	0	0	2	1
7	A226088	Advanced English Communication Skills Lab	0	0	2	1
8	A2265P1	Industrial Oriented Mini Project / Internship	0	0	4	2
9	A226020	Environmental Science	2	0	0	0
		Total	17	1	8	20

B. TECH FOURTH YEAR COURSE STRUCTURE

B. Tech IV Year I Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A2275E7	Big Data Analytics	3	0	0	3
2	A2275E8	Cloud Computing and Security	3	0	0	3
3	A2275E9	Professional Elective-III Fundamentals of Machine Learning	3	0	0	3
	A2275F0	Internet of Things				
	A2275F1	Mobile Application Development				
	A2275F2	Deep Learning				
4	A2275F3	Professional Elective – IV Advanced Databases	3	0	0	3
	A2275F4	Information Security				
	A2275F5	Natural Language Processing				
	A2275F6	Block Chain Technologies				
5	A2275F7	Open Elective-III Web Design	3	0	0	3
	A2275F8	IoT and Applications				
	A2275F9	Fundamentals of Cyber Security				
6	A2275C2	Big Data Analytics Lab	0	0	2	1
7	A2275C3	Professional Elective-III lab Fundamentals of Machine Learning Lab	0	0	2	1
	A2275C4	Internet of Things Lab				
	A2275C5	Mobile Application Development Lab				
	A2275C6	Deep Learning Lab				
8	A2275PS1	Project Stage-I	0	0	6	3
		Total	15	0	10	20

B. Tech IV Year II Semester

Sl. No.	Course Category	Course Title	L	T	P	Credits
1	A2285J4	Semantic Web & Social Networks	3	0	0	3
2	A2285J5	Introduction to Data Science	3	0	0	3
3	A2285J6	E-Commerce	3	0	0	3
4	A2285PS2	Project Stage-II (Including Seminar)	0	0	22	9+2
		Total	9	0	22	20

Open Elective Courses offered By CSE

Open Elective – I

1. Basics of Operating Systems
2. Core Java Programming
3. Fundamentals of Computer Networks

Open Elective – II

1. Fundamentals of Database Management Systems
2. Software Engineering Fundamentals

Open Elective – III

1. Web Design
2. IoT and Applications
3. Fundamentals of Cyber Security