

Course Curriculum Framework

Name of Program BTECH (Computer Technology) OJT Starting 6th Semester

Type of Course Sem	Major Core					Skill Enhancement	Ability Enhancement	Value Added Courses	Multi-disciplinary	OJT	Audit Course
	Discipline Core 1 & 2	Discipline Core 3 & 4	Discipline Core 5	Discipline Elective 1	Discipline Elective 2						
Semester I	1. Discrete Mathematics (4) 2. Programming Language (2)	3. Information Technology Essentials (2) 4. Web Technologies + Certipoint Certification (2)	5. Basics of Electrical & Electronics Engg (2)	--	--	1. Engg Graphics and CAD Lab (2) 2. Programming Language – Lab (2)	1. Engg Graphics and CAD (2) 2. Electrical and Electronics Engg Lab (2)	--	--		Environmental Science and Engg (0)
Semester II	1. Engg Mathematics - Module I - Linear Algebra, Module II - Probability and Statistics (4) 2. Theory of computing (2)	3. Data Structures and Algorithms (2) 4. Database System Concepts (2)	5. Computer Architecture (2)	--	--	1. Database System Lab + SQL Certification (2) 2. Physical computing Lab (2)	1. Computer Networks (2) 2. DS and CN Lab (2)	Climate Change and Carbon Credits/ (1)			Universal Human Values (0)
Exit UG Certificate											
Semester III	1. Object Oriented Analysis and Design (2) 2. Operating Systems (Desktop, Mobiles) (2)	--	--	A. Full stack development- Java Programming with Certification (4) B. Artificial Intelligence and Machine learning (with Certification) (4)	A. Full Stack frontend- Angular (3) B. Java Programming (3)	1. Capstone Project on Discipline Elective I and II (2)	1. OOAD and OS Lab (2)	A. Foreign Language I – French / German/ Japanese (1)	1. Organization Behaviour (2) 2. Financial Literacy (2)	--	Communication and Personality Development - I (0)

Semester IV	1. Software Engg and Agile Methodology (2) 2. Fundamentals of Data Science with Certification (3)	--	--	A. Full Stack framework- Java Web and Spring Framework (4) B. Preparation and Analysis of Data (4)	A. Data Warehousing and Big Data (3) B. Deep Learning (3)	Capstone Project on Discipline Elective 1 and II (2)	Software Engg and Data Science Lab (2)	A. Foreign Language II – French / German/ Japanese (1)	1. MIS – (case study based) (2) 2. Intellectual property Rights IPR (2)	--	Communication and Personality Development – II (0)
Diploma in Computer Technology											
Semester V	1. Compiler Construction (3) 2. UI / UX Design (3)			A. Full Stack- Microservices (4) B Business Analytics (4)	A IOT - Interfacing and Programming (3) B. Computational Linguistic Analysis (3)	Project (2)	Cloud Infra Fundamentals AWS Certification (2)	A. Foreign Language III – French / German/ Japanese (1)	Design Thinking and Innovation (2)		Communication and Personality Development - III (0)
Semester VI	--	--	--	--	--	--	Agile Scrum with Certification (4)	--		OJT (16)	A. Constitution of India (0) B. Entrepreneurship (0)
B.Voc in Computer Technology											
Semester VII	--	--	--	--	--	--	Research Methodology (2)		Industrial Psychology (2)	OJT (16)	A. Disaster Management (0) B. Entrepreneurship (0)
Semester VIII	--	--	--	--	--	--	Software Project Management with Certification (4)		--	OJT (16)	English for research paper writing(0)
BTech in Computer Technology											