

Course Structure: Year 2022-23	
B. Tech. Integrated (Computer Engineering)	
First Year (Common for All Branches)	
Semester - I	Semester - II
Mathematics-I	Mathematics-II
Physics-I	Physics-II
Chemistry-I	Introduction to Electrical and Electronics Engineering
Engineering Drawing	Fundamentals of Mechanics-Statics
Mechanical Workshop	Introduction to IT Systems
Preparatory Course in English	Electrical and Computer Workshop
B. Tech. Integrated (Computer Engineering) Second Year	
Semester - III	Semester - IV
Mathematics-III	Mathematics-IV
Physics-III	Chemistry-II
C Programming	Physics-IV
Basic Electronics	Basics of Python
Computer Hardware and Maintenance	Multimedia and Animation
Constitution of India	
B. Tech. Integrated (Computer Engineering) Third Year	
Semester - V	Semester - VI
Calculus	Linear Algebra and Differential Equations
Physics	Quantum and Statistical Physics
Elements of Biology	English Communication
Programming for Problem Solving	Basic Electrical and Electronics Engineering
Engineering Graphics and Design	Management Accounting for Engineers
Professional Ethics	Environmental Science
Constitution of India	Digital Manufacturing Laboratory
Critical Thinking	Electrical and Electronics Workshop
	Design Thinking
	Python Programming
B. Tech. Integrated (Computer Engineering) Fourth Year	
Semester -VII	Semester VIII
Probability and Statistics	Complex Variables and Transforms
Discrete Mathematics	Computer Organization and Architecture
Technical Communication	Design and Analysis of Algorithms
Principles of Economics and Management	Database Management Systems
Digital Logic Design	Microprocessor and Microcontroller
Data Structures and Algorithms	Theoretical Computer Science
Computer Networks	Web Programming
Data Extraction and Processing	Object Oriented Programming through JAVA
Community Service	
B. Tech. Integrated (Computer Engineering) Fifth Year	
Semester IX	Semster X
Software Engineering	Cyber Security
Artificial Intelligence	Distributed Computing
Image and Video Processing	Machine Learning
Operating Systems	Department Elective II
Department Elective I	Department Elective III
Open Elective I	Open Elective III
Open Elective II	Open Elective IV
	Interpersonal Skills
B. Tech. Integrated (Computer Engineering) Sixth Year	
Semester XI	Semester XII
Cloud Computing	Project
Department Elective IV	
Department Elective V	
Department Elective VI	
Open Elective V	
Capstone Project	
Technical Internship	

Course Structure: Year 2022-23	
B. Tech. Integrated (Data Science)	
First Year (Common for All Branches)	
Semester - I	Semester - II
Mathematics-I	Mathematics-II
Physics-I	Physics-II
Chemistry-I	Introduction to Electrical and Electronics Engineering
Engineering Drawing	Fundamentals of Mechanics-Statics
Mechanical Workshop	Introduction to IT Systems
Preparatory Course in English	Electrical and Computer Workshop
B. Tech. Integrated (Data Science) Second Year	
Semester - III	Semester - IV
Mathematics-III	Mathematics-IV
Physics-III	Physics-IV
Chemistry-II	Basics of Python
C Programming	Multimedia and Animation
Basic Electronics	Constitution of India
Computer Hardware and Maintenance	
B. Tech. Integrated (Data Science) Third Year	
Semester - V	Semester - VI
Calculus	Linear Algebra and Differential Equations
Elements of Biology	Computer Graphics
Programming for Problem Solving	Fundamentals of E-commerce
Basic Data Structures	Java Programming
Fundamentals of Website Designing	Critical Thinking
Design Thinking	Professional Ethics
English Communication	
B. Tech. Integrated (Data Science) Fourth Year	
Semester - VII	Semester - VIII
Optimization Methods	Management Accounting for Engineers
Principles of Economics and Management	Stochastic processes and applications
Managing Uncertainty	Statistical Structures in Data and Inference
Data Wrangling	Database Management Systems
Information Security and Privacy	Data handling and visualization
Python For Data Analysis	Introduction to Data, Signal, and Image Analysis
Technical Communication	Mobile Application Development
Community Service	
B. Tech. Integrated (Data Science) Fifth Year	
Semester - IX	Semester - X
Introduction to Modern Application Development	Computer Vision and Applications
Applied Artificial Intelligence	Applications of Machine Learning
Foundations of Machine Learning	Advance Data Structure for Analytics
Department Elective - I	Department Elective - III
Department Elective - II	Open Elective III
Open Elective I	Open Elective IV
Open Elective II	Interpersonal Skills
B. Tech. Integrated (Data Science) Sixth Year	
Semester - XI	Semester - XII
Neural Networks and Deep Learning	Project
Natural Language Processing	
Big Data	
Machine Learning Engineering	
Department Elective - IV	
Department Elective - V	
Capstone Project	

Course Structure: Year 2022-23	
B. Tech. Integrated (Information Technology)	
First Year (Common for All Branches)	
Semester - I	Semester - II
Mathematics-I	Mathematics-II
Physics-I	Physics-II
Chemistry-I	Introduction to Electrical and Electronics Engineering
Engineering Drawing	Fundamentals of Mechanics-Statics
Mechanical Workshop	Introduction to IT Systems
Preparatory Course in English	Electrical and Computer Workshop
B. Tech. Integrated (Information Technology) Second Year	
Semester - III	Semester - IV
Mathematics-III	Mathematics-IV
Physics-III	Physics-IV
Chemistry-II	Data Structures
Programming for Problem Solving	Introduction to Linux
Multimedia and Animation	Environmental Science
	Constitution of India
B. Tech. Integrated (Information Technology) Third Year	
Semester - V	Semester - VI
Calculus	Linear Algebra and Differential Equations
Elements of Biology	Unix Shell Programming
Introduction to Data Communication and Networks	Introduction to Web Development
Design and Analysis of Algorithms	Innovation and Entrepreneurship
Introduction to IT Infrastructure Landscape	Implementation of Technology
Design Thinking	Critical Thinking
Fundamentals of English Communication	Professional Ethics
B. Tech. Integrated (Information Technology) Fourth Year	
Semester - VII	Semester - VIII
Discrete Mathematics	Probability and Statistics
Signal and Systems	Management Accounting for Engineers
Principles of Economics and Management	Operating Systems
Technical Communication	Computer Organisation and Architecture
Digital Logic Design	Object Oriented Programming
Database Management Systems	Principles of Artificial Intelligence
Computer Networks	Programming for Analytics
Web Programming	Data Warehousing and Mining
Python Programming	
Community Service	
B. Tech. Integrated (Information Technology) Fifth Year	
Semester - IX	Semester - X
Human Computer Interaction	Interpersonal Skills
Embedded Systems	Mobile Application Development
Software Engineering	Machine Learning Algorithms
Department Elective I (Choose any one)	Software Project Management
Visual Analytics	System Administration
Open Elective I **	Department Elective II (Choose any one)
Open Elective II ***	Department Elective III (Choose any one)
	Open Elective III++
	Open Elective IV+++
B. Tech. Integrated (Information Technology) Sixth Year	
Semester - XI	Semester - XII
Department Elective IV (Choose any one)	Project
Department Elective V(Choose any one)	
Information Systems Security	
Cloud Computing	
Open Elective V##	
Capstone Project	

Course Structure: Year 2022-23

B. Tech. Integrated (Mechanical Engineering)

Semester - I		Semester - II	
Mathematics-I		Mathematics-II	
Physics-I		Physics-II	
Chemistry-I		Introduction to Electrical and Electronics Engineering	
Engineering Drawing		Fundamentals of Mechanics-Statics	
Mechanical Workshop		Introduction to IT Systems	
Preparatory Course in English		Electrical and Computer Workshop	
B. Tech. Integrated (Mechanical Engineering) Second Year			
Semester-III		Semester-IV	
Mathematics-III		Mathematics-IV	
Physics-III		Physics-IV	
Chemistry-II		Basic Thermodynamics	
Engineering Graphics		Solid Mechanics	
Basics of Manufacturing Engineering		Basics of Machine Drawing	
Elements of Mechanical Engineering		Constitution of India	
B. Tech. Integrated (Mechanical Engineering) Third Year			
Semester-V		Semester-VI	
Calculus		Linear Algebra and Differential Equations	
Theory of Machines and Mechanisms		Elements of Biology	
Production Technology		Industrial Engineering and Ergonomics	
Introduction to 3D Printing Technology		Python for Mechanical Engineers	
Programming for Problem Solving		Fundamentals of Engineering Design	
Design Thinking		Automotive Engineering	
English Communication		Critical Thinking	
Manufacturing Workshop-II		Professional Ethics	
B. Tech. Integrated (Mechanical Engineering) Fourth Year			
Semester-VII		Semester-VIII	
Complex Variables and Transforms		Probability and Statistics	
Engineering Mechanics		Strength of Materials	
Engineering Thermodynamics		Kinematics and Dynamics of Machines	
Manufacturing Processes-I		Applied Thermodynamics	
Machine Drawing		Machine Shop-I	
Materials Engineering		Management Accounting for Engineers	
Principles of Economics and Management		Classical Physics	
Community Service			
Technical Communication			
B. Tech. Integrated (Mechanical Engineering) Fifth Year			
Semester-IX		Semester-X	
Design of Machine Elements		Heat Transfer	
Manufacturing Processes-II		CAD/CAM/CIM	
Fluid Mechanics		Industrial Applications of HVAC	
Department Elective - I		Machine Shop-II	
Department Elective - II		Department Elective - III	
Open Elective - I		Department Elective - IV	
Open Elective - II		Open Elective - III	
		Open Elective - IV	
		Interpersonal Skills	
B. Tech. Integrated (Mechanical Engineering) Sixth Year			
Semester-XI		Semester-XII	
Finite Element Analysis		Project	
Mechanical Measurements and Metrology			
Department Elective - V			
Department Elective - VI			
Open Elective - V			
Capstone Project			