

CURRICULUM STRUCTURE

Year 1

GAIN FOUNDATIONAL UNDERSTANDING OF MATHEMATICAL CONCEPTS, SCIENTIFIC PRINCIPLES, AND FUNDAMENTAL PRINCIPLES AND STATISTICAL FOUNDATIONS OF DATA SCIENCE.

Year 2

EXPLORE THE INTRICACIES OF THE DATA SCIENCE DISCIPLINE THROUGH A WELL-ROUNDED CURRICULUM THAT INCLUDES A BALANCED MIX OF CORE COURSES



Year 3

STUDENTS HAVE THE OPTION TO SELECT FROM A DIVERSE RANGE OF ELECTIVE FOCUS AREAS, ALLOWING THEM TO DELVE DEEPER AND GAIN SPECIALIZED EXPERTISE IN THEIR CHOSEN FIELD

Year 4

APPLY AND SHOWCASE YOUR SKILLS THROUGH REAL-WORLD PROFESSIONAL INTERNSHIPS AND A CULMINATING DISSERTATION PROJECT

BTech Degree in CSE (Data Science)

Year 1

Year 2

Year 3

Year 4

DS
Jobs

Foundation Courses

- Linear Algebra and Differential Equations
- Engineering Physics
- Engineering Graphics And Design Thinking
- Introduction to Electronics
- Introduction to Electrical Engineering

CSE Courses

- Transform Calculus, Fourier Series and Numerical Techniques
- Digital Logic Design
- Discrete Mathematics and Graph Theory
- Basics of Computer Networks
- Probability, Statistics & Stochastic Processes
- Computer Organization and Architecture

CSE (Data Science) Courses

- Finite Automata and Formal Language
- Software Engineering and Project Management
- OOPS with Java
- Fundamentals of Data Science
- Compiler Design and System Software
- Advanced Data Science

Cutting Edge Technologies

- Bio Inspired Learning
- NLP Tools & Tecstack Dehnniques
- Full Stack Development
- Social Network Analysis
- Recommender Systems
- Augmented Reality and Virtual Reality
- Information Retrieval
- Knowledge Engineering and Expert Systems

Skill Enhancements

- C Programming for Problem Solving
- Python Programming for Problem Solving

CSE Courses

- Data Structures
- Design and Analysis of Algorithms
- Database Management System

Professional DS courses

- Data Warehouse and Knowledge Mining
- Data Analytics with Hadoop
- Pattern Analysis in Data Science
- Data Privacy and Security

Interdisciplinary Elective courses

- Foundations of Data Science
- Data Exploration and Visualization
- Business Analytics

Liberal Studies/ Ethical Courses

- Technical English
- Constitution of India and Professional Ethics
- Biology for Engineers
- Python/R Programming

Skill Enhancements

- Introduction to Linux Programming
- Introduction to Web Development
- DevOps
- NoSQL, MongoDB, MySQL

Skill Enhancements

- Data Analytics and Visualization Tools
- Introduction to IOT
- Management and Entrepreneurship
- SAS Programming
- Special topic projects

Skill Enhancements

- Research Internship
- Industry Internship
- Research Projects
- Major Projects