

I Semester



- Calculus and Matrix Algebra
- Applied Chemistry
- Mind Management and Human values - 1
- Computer Aided Engineering Drawing
- Engineering Physics
- Communicative English
- Biology for Engineers
- Electrical and Electronics for computational thinking
- Project Centric Learning

II Semester



- Problem Solving Techniques
- Computer Organization and Architecture
- Probability and Vector Space
- Mind Management and Human Values – 2
- Programming practices using Java
- Python Programming
- Project – 1
- Data Structures

III Semester



- Discrete Mathematics and Graph Theory
- Operating Systems
- Data Communication and Networks
- Indian Constitution
- Foundations of Mathematics – 1+
- Design and Analysis of Algorithms
- Theory of Computation
- Database Management Systems
- Project Centric Learning

IV Semester



- Enterprise Information Systems
- Linux Administration
- Business Communication and Presentation Skills
- Research Methodology
- Department Specific Elective – 1
- Open Elective – 1
- Project Centric Learning

V Semester



- Foundations of Cloud Computing
- Compiler Design
- Web Technologies
- Software Engineering
- Cryptography and network security
- Foundations of Mathematics– 2+
- Project – 2
- Internship -1

VI Semester



- IAdvanced DBMS
- IDepartment Specific Elective – 2
- IEnvironmental Science
- IDepartment Specific Elective – 3
- IDecision Support System
- IOpen Elective – 2
- IProject – 3
- Internship - 2

VII Semester



- Information and Network Security
- Department Specific Elective – 4
- Information Retrieval
- Intellectual Property Rights
- Web Searching and Information Discovery
- Department Specific Elective – 5
- Open Elective – 3
- Project - 4

VIII Semester



- Data Mining and Business Intelligence
- Department Specific Elective – 6
- Text Mining Techniques and Tools
- Research *
- Internship - 3
- Internship - 3

| Department Specific Electives | | | | | | | |
|-------------------------------|----------------------------------|--|-------------------------------|---|---|--------------------------|------------------------------|
| DSE Tracks | | Elective-I | Elective-II | Elective-III | Elective-IV | Elective-V | Elective-VI |
| | | 5 th Semester | 6 th Semester | 6 th Semester | 7 th Semester | 7 th Semester | 8 th Semester |
| Track - I | Cloud Developer | Information theory and coding | Object-Oriented System Design | Software Quality Assurance and Software Testing | Software Design and System Integration | Cloud Computing | IoT Project Management |
| Track - II | Full Stack Developer | Real Time Data Processing | Mobile Computing | Multimedia computing | Distributed Architecture of Enterprise Applications | Soft Computing | IT Infrastructure Technology |
| Track - III | Security in Software Engineering | IOT (Internet of Things) Platform Design | Advanced Software Engineering | Embedded Computing System | Distributed Database Management Systems | Database Security | DevOps |

| Computer Science and Engineering (Open Elective Baskets) | | | |
|--|---------------------------------------|---|--------------------------|
| Sl. No | Finance and Accounting | Entrepreneurship and new venture creation | Marketing and Management |
| 1 | Finance for non-finance professionals | Entrepreneurship Theory and Practice | Marketing Management |
| 2 | Wealth Management | Launching and managing an enterprise | Consumer Behavior |
| 3 | Indian Financial System | Business Plan and Project Implementation | Brand Management |
| 4 | Financial Reporting | Sustainable Entrepreneurship | Product Management |