

B.Tech (Computer Science & Social Sciences)

Course Structure

Semester 1

- Basic Electrical Engineering [Engineering Sciences Courses]
- Engineering Graphics Lab [Engineering Sciences Courses]
- Introduction to Environmental Studies [Engineering Sciences Courses]
- Applied Mathematics- I [Basic Sciences Courses]
- Engineering Chemistry [Basic Sciences Courses]
- Technical Communication – I [Communication Skills]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 2

- Engineering Mechanics [Engineering Sciences Courses]
- Introduction to Computers and Programming in C [Engineering Sciences Courses]
- Workshop Practices [Engineering Sciences Courses]
- Applied Mathematics - II [Basic Sciences Courses]
- Engineering Physics [Basic Sciences Courses]
- Technical Communication – II [Communication Skills]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 3

- Term Paper [Non-Teaching Credit Courses]
- Digital Electronics and Computer Organization [Engineering Sciences Courses]
- Object Oriented Programming [Engineering Sciences Courses]
- Data Structures Using C [Core Courses]
- Microeconomics [Core Courses]
- Applied Mathematics- III [Basic Sciences Courses]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 4

- Self-Reliance and Socialization [Human Social Sciences & Management Courses]
- Basic Simulation Lab [Engineering Sciences Courses]
- Database Management Systems [Core Courses]
- Introduction to Sociology [Core Courses]
- Operating System [Core Courses]
- Introduction to Human Computer Interaction [Core Courses]
- Statistical Methods [Basic Sciences Courses]
- Foreign Business Language

- Open Elective Courses
- Outdoor Activity Based Courses

Semester 5

- Analysis and Design of Algorithms [Core Courses]
- Critical Thinking and Readings in Social Sciences [Core Courses]
- Software Engineering [Core Courses]
- Information Technology and Society [Core Courses]
- Econometrics [Specialisation Elective Courses]
- ICT and Social Transformation [Specialisation Elective Courses]
- User Experience Research : Qualitative Perspective [Specialisation Elective Courses]
- Intelligent Systems and Design Thinking [Specialisation Elective Courses]
- Cyber and Information Security [Specialisation Elective Courses]
- Discrete Mathematical Structures [Specialisation Elective Courses]
- Distributed System [Specialisation Elective Courses]
- Green Computing [Specialisation Elective Courses]
- Python Programming [Specialisation Elective Courses]
- In-House Practical Training [Non-Teaching Credit Courses]
- Exploring the Networks [Industry Specific Courses]
- Aptitude and Reasoning Ability [Employability & Skill Enhancement Courses]
- Introduction to Python [Specialisation Elective Courses]
- Cognitive Skills, Leadership and Decision Making [Behavioural Science]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 6

- Artificial Intelligence [Core Courses]
- Software Project Management [Core Courses]
- Game Theory [Core Courses]
- Mobile Application Development [Specialisation Elective Courses]
- IT Infrastructure Management [Specialisation Elective Courses]
- Market Design [Specialisation Elective Courses]
- Research Methods in Social Science and Design [Specialisation Elective Courses]
- Social Psychology [Specialisation Elective Courses]
- Computer Graphics [Specialisation Elective Courses]
- Sociology for New Media [Specialisation Elective Courses]
- Decision Theory [Specialisation Elective Courses]
- AI and Society [Specialisation Elective Courses]
- Data Center Virtualization [Specialisation Elective Courses]
- Data Mining and Business Intelligence [Specialisation Elective Courses]
- Full Stack Development [Specialisation Elective Courses]
- Information Assurance and Security [Specialisation Elective Courses]
- Linux for Devices [Specialisation Elective Courses]
- Optimization Methods [Specialisation Elective Courses]
- Parallel Computing [Specialisation Elective Courses]
- Routing and Switching in Networks [Specialisation Elective Courses]

- Programming and Employability Skills [Employability & Skill Enhancement Courses]
- Professional Ethics and Social Responsibility [Professional Ethics]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 7

- Social Network Analysis [Core Courses]
- Cognitive Science and Analytics [Specialisation Elective Courses]
- Organizational Psychology [Specialisation Elective Courses]
- Digital Ethics [Specialisation Elective Courses]
- Consumer Culture and Society [Specialisation Elective Courses]
- Advanced Network Solution [Specialisation Elective Courses]
- Big Data Analytics [Specialisation Elective Courses]
- Cloud Infrastructure Services [Specialisation Elective Courses]
- Software Testing and Quality Assurance [Specialisation Elective Courses]
- Block Chain and Distributed Ledger Technologies [Specialisation Elective Courses]
- Simulation and Modeling [Specialisation Elective Courses]
- Internet of Things [Specialisation Elective Courses]
- Principles of 3D-Applications [Specialisation Elective Courses]
- Principles of Virtual Reality [Specialisation Elective Courses]
- Data Center Virtualization [Specialisation Elective Courses]
- Advanced Java Programming [Specialisation Elective Courses]
- Digital Image Processing and Computer Vision [Specialisation Elective Courses]
- Dynamic Routing and Troubleshooting [Specialisation Elective Courses]
- Industry Internship [Non-Teaching Credit Courses]
- Social Networks [MOOC (Amity On - line / NPTEL / SWAYAM / Future Learn)]
- Minor Project [Mandatory Courses]
- Professional Ethics and Social Responsibility [Professional Ethics]
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 8

- Major Project [Non-Teaching Credit Courses]