B.Tech (Computer Science & Business System)
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]
- Basic Electronics Engineering [Engineering Sciences Courses]
- Object Oriented Programming [Engineering Sciences Courses]
- Data Structures Using C [Core Courses]
- Introduction to Management Principles [Core Courses]
- Computer Organization and Architecture [Core Courses]
- Applied Mathematics- III [Basic Sciences Courses]
- Foreign Business Language
- Open Elective Courses
- Outdoor Activity Based Courses

Semester 4

- Information Theory & Coding [Specialisation Electives for Hons. (Networks and Information Security)]
- Cloud Computing Practitioner [Specialisation Electives for Hons. (Cloud Computing)]
- Exploring the Networks [Industry Specific Courses]
- Self-Reliance and Socialization [Human Social Sciences & Management Courses]
- Basic Simulation Lab [Engineering Sciences Courses]
- Database Management Systems [Core Courses]
• Operations Management [Core Courses]
• Operating System [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]
• Business Research Methods [Core Courses]
• Software Engineering [Core Courses]
• Managerial Economics [Specialisation Elective Courses]
• Accounting for Management [Specialisation Elective Courses]
• Kinematics and Dynamics of Machines [Specialisation Electives for Minor Degree (Robotics )]
• Information Theory & Coding [Specialisation Electives for Hons. (Networks and Information Security )]
• Essentials of IoT [Specialisation Electives for Hons. (IoT )]
• Introduction To Data Science [Specialisation Electives for Hons. (Data Science & Analytics )]
• Cloud Computing Practitioner [Specialisation Electives for Hons. (Cloud Computing )]
• Introduction to Web Technologies [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]
• Intelligent Systems and design thinking [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

• Embedded Robotics Programming [Specialisation Electives for Minor Degree (Robotics )]
• Fundamentals of Molecular Modelling and Drug Design [Specialisation Electives for Minor Degree (Bioinformatics )]
• Network Management and Security [Specialisation Electives for Hons. (Networks and Information Security )]
• IoT System & Applications [Specialisation Electives for Hons. (IoT )]
• R Programming [Specialisation Electives for Hons. (Data Science & Analytics )]
• Linux for Devices [Specialisation Electives for Hons. (Cloud Computing )]
• Fundamentals of Data Analytics [Specialisation Electives for Hons. (Artificial Intelligence and Machine Learning)]
• Artificial Intelligence [Core Courses]
• Software Project Management [Core Courses]
• Entrepreneurship and New Venture Creation [Core Courses]
• Mobile Application Development [Specialisation Elective Courses]
• IT Infrastructure Management [Specialisation Elective Courses]
• Marketing Management [Specialisation Elective Courses]
• Human Resource Management [Specialisation Elective Courses]
• Cognitive Science & Analytics [Specialisation Elective Courses]
• Computer Graphics [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]
• Data Analytics with Python [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Innovation by Designs [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Product Management & Research [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Software Conceptual Design [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Programming and Employability Skills [Employability & Skill Enhancement Courses]
• Country Report [SAP Courses (Optional)]
• Understanding Principles & Practices of Commercial Research [SAP Courses (Optional)]
• Professional Ethics and Social Responsibility [Professional Ethics]
• Foreign Business Language
• Open Elective Courses
• Outdoor Activity Based Courses

Semester 7

• Strategic Management [Core Courses]
• Financial Modeling [Specialisation Elective Courses]
• Legal Aspects of Business [Specialisation Elective Courses]
• International Business & Practice [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]
• Introduction to Machine Learning [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Social Networks [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Deep Learning and Artificial Intelligence [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Ethical Hacking - NPTEL [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Machine Learning with Python [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• Product Management & Research [MOOC (Amity On-line / NPTEL / SWAYAM / Future Learn)]
• 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]