**Syllabus**

**Diploma in Information Technology**

Sem – I

1. English
2. Basic Science
3. Basic Mathematics
4. Engineering Graphics
5. Computer Fundamentals

Sem – II

1. Communication Skills
2. Applied Science
3. Programming in C
4. Basic Electronics
5. Engineering Mathematics

Sem – III

1. Applied Mathematics
2. Data Structure Using C
3. Electrical Technology
4. Relational Database Management System
5. Digital Techniques

Sem – IV

1. Environmental Studies
2. Computer Hardware & Maintenance
3. Data Communication & Networking
4. Microprocessor & Programming
5. Object Oriented Programming

Sem – V

1. Applied Multimedia Technology
2. Software Engineering
3. Java Programming
4. Operating System
5. Communication System

Sem – VI

1. Advanced Java Programming
2. Data Communication & Networking
3. Entrepreneurship Development
4. Industrial Projects
5. Advanced Web Technology

**Bachelor Program in Information Technology Engineering**

Sem – I

1. Calculus
2. Physics
3. Mechanics of Solids
4. Engineering Graphics
5. English
6. Linear Algebra

Sem – II

1. Chemistry
2. Environment & Energy Studies
3. Art of Programming
4. Elements of Electrical Engineering
5. Communication Skills
6. Electronic Devices & Circuit

Sem – III

1. Basic Electronics
2. Digital System
3. Object Oriented Programming
4. Mathematical Foundation of Computer Science
5. Applied Mathematics
6. ICT Tools & Security

Sem – IV

1. Communication Engineering
2. Computer Organization
3. Data Structure
4. Probability Statistics & Numerical Analysis
5. Computer Peripherals
6. Economics For Engineers

Sem – V

1. Theory of Computation
2. Database Management Systems
3. Data Communication Networks
4. Operating Systems
5. Web Designing
6. Law For Engineers

Sem – VI

1. Software Engineering
2. Capstone Course
3. Creativity & Innovation
4. Design & Analysis of Algorithms
5. .net Technologies
6. Java Technologies

Sem – VII

1. Objective C Programming
2. Embedded Programming
3. LAMP Technology
4. Mobile Applications Development Technologies
5. Advanced Computer Networks
6. Machine Human Interface

Sem – VIII

1. Computer Graphics & Visualization
2. Main Frame Systems
3. Network Security & Encryption
4. Cloud Computing
5. Software Testing
6. Business Analysis & Optimization

**Master Program in Information Technology Engineering**

Sem – I

1. Data Structure & Algorithms
2. Communication Techniques
3. High Speed Networks
4. Advance Computing Systems
5. Information & Network Security
6. Communication Skills for Engineers
7. Comprehensive Assessment - I

Sem – II

1. Network Embedded Systems
2. Information & Retrieval Systems
3. Wireless Networks
4. Software Engineering
5. Software Testing & Quality Assurance
6. Modern Database
7. Machine Learning

Sem – III

1. Data Warehousing & Mining
2. Artificial Intelligence
3. Comprehensive Assessment - II
4. Cyber Security
5. Huffman Coding
6. Arithmetic Coding
7. Wavelet Based Compression

Sem – IV

1. Proxy Servers & Firewalls
2. Electronic Payment Systems
3. Malware Analysis
4. Security Audit & Standards
5. Malicious Software
6. Buffer Overflow
7. Specialization