

B Tech (Instrumentation & Control Engineering)

Semester I

- 1 Engineering Mathematics
- 2 Engineering Physics
- 3 Engineering Chemistry
- 4 Engineering Graphics
- 5 Engineering Mechanics

Semester II

- 1 Basic Civil Engineering
- 2 Basic Mechanical Engineering
- 3 Basic Electrical and Electronics Engineering
- 4 Basic Communication and Information Engineering
- 5 Engineering Workshops

Semester III

- 1 Engineering Mathematics II
- 2 Economics and Communication Skills
- 3 Network Theory
- 4 Analog Devices & Circuits
- 5 Basic Instrumentation & Measurements Engineering
- 6 Computer Programming
- 7 Basic Electronics Laboratory
- 8 Programming Lab(C, C++ ,Mat lab)

Semester IV

- 1 Engineering Mathematics III
- 2 Principles of Management
- 3 Transducer Engineering
- 4 Digital Electronics
- 5 Electrical Engineering
- 6 Mechanical Engineering
- 7 Electrical Machines Laboratory
- 8 Digital IC Laboratory

Semester V

- 1 Engineering Mathematics IV
- 2 Industrial Electronics & Applications
- 3 Electronics Instrumentation
- 4 Linear Integrated Circuits
- 5 Linear Control System
- 6 Microprocessors and Microcontrollers
- 7 Microprocessors and Microcontrollers Lab
- 8 Linear Integrated Circuits Lab

Semester VI

- 1 Process Control Instrumentation
- 2 Principles of Telemetry & Communication
- 3 Industrial Instrumentation – I
- 4 Signals & Systems with Processing
- 5 Advanced Control Systems
- 6 Elective-I
- 7 Industrial Instrumentation Laboratory
- 8 Mini Project

Elective I

- 1 Mechatronics
- 2 Computer Networks & Projects
- 3 Advanced Microcontrollers
- 4 Embedded System Design
- 5 Digital System Design
- 6 Data Structures & Algorithm

Semester VII

- 1 Computer Control of Industrial Process
- 2 Optical and opto Electronic Instrumentation
- 3 Biomedical Instrumentation
- 4 Analytical Instrumentation
- 5 Industrial Instrumentation-II
- 6 Elective-II
- 7 Process Control Laboratory
- 8 Mechanical Measurements Laboratory
- 9 Seminar
- 10 Project

Elective II

- 1 Artificial Intelligence & Expert systems
- 2 Robotics & Automation
- 3 Embedded Instrumentation system
- 4 Ultrasonic Instrumentation
- 5 VLSI Design
- 6 Virtual Instrumentation

Semester VIII

- 1 Instrumentation System Design
- 2 Power Plant Instrumentation
- 3 Instrumentation & Control in Petrochemical Industries
- 4 Elective III
- 5 Elective IV
- 6 System Simulation Laboratory
- 7 Project
- 8 Viva voce

Elective III

- 1 Intelligent Control system
- 2 Automotive Instrumentation
- 3 Instrumentation & Control Paper Industries

- 4 Digital Image Processing Techniques
- 5 Instrumentation & Control in Aerospace & Navigation
- 6 Telecommunication & Switching networks

Elective IV

- 1 Test Engineering
- 2 Multimedia systems
- 3 Total Quality Managements
- 4 Bio Informatics
- 5 Intellectual Property Rights
- 6 Professional Ethics