

Department of Electronics and Telecommunication Engineering

B.E. 5th Sem

Course: Analog Electronics – II

Course Code: (5ET1)

At the end of Analog Electronics – II course the student will be able:

- CO 1:** To acquire and apply knowledge for design of voltage regulator circuits using ICS and discrete components.
- CO 2:** To analyze and design electronic circuits for various linear and non-linear applications.
- CO 3:** To design waveform generator circuits using different ICs.
- CO 4:** To design temperature monitoring system using Op-Amp and sensors.
- CO 5:** To design frequency multiplier using IC565.
- CO 6:** To design various linear and nonlinear applications by using IC 741.

Course: Power Electronics & Drive

Course Code: (5ET2)

At the end of Power Electronics & Drive course the student will be able:

- CO 1:** To analyze requirements for power electronics based design applications.
- CO 2:** To apply fundamental concepts and techniques in power electronics.
- CO 3:** To design various single phase and three phase power converter circuits.
- CO 4:** To build and troubleshoot various power electronics circuits like inverters and classify commutation methods.
- CO 5:** To understand the principle of Choppers and Cycloconverters.
- CO 6:** To explain the use power electronics drives in commercial and industrial applications

Course: Microprocessor & Microcontroller

Course Code: (5ET3)

At the end of Microprocessor & Microcontroller course the student will be able:

- CO 1:** To understand fundamentals of microprocessor systems.
- CO 2:** To Develop Assembly Language Programming concepts and understand the data transfer schemes.
- CO 3:** To deal with interfacing of different peripheral devices with microprocessor.
- CO 4:** To understand the fundamentals of Microcontroller systems and architectural difference between Microprocessor & Microcontroller.
- CO 5:** To Develop Assembly Language Programming concepts of Microcontroller.
- CO 6:** To deal with interfacing of different peripheral devices with Microcontroller.

Course: Communication Engineering-II

Course Code: (5ET4)

At the end of Communication Engineering-II course the student will be able:

- CO 1:** To understand the modulation, analog communication systems and Amplitude Modulation.
- CO 2:** To classify the different types of AM receiver.
- CO 3:** To understand Frequency Modulation.
- CO 4:** To classify the different types of FM receiver.
- CO 5:** To understand the necessity of types of Wave propagation.
- CO 6:** To analyze the different types of antenna. .

B.E. 6th Sem

Course: Microcontroller Programing and Applications

Course Code: (6ET1)

At the end of Microcontroller Programing and Applications course the student will be able:

- CO 1:** To understand and use various members of the AVR family.
- CO 2:** To understand AVR addressing modes and assembly language instructions.
- CO 3:** To develop logic in assembly and C programming for AVR.
- CO 4:** To use different inbuilt blocks of AVR.
- CO 5:** To implement a system for dedicated applications.
- CO 6:** To understand different serial protocols and IDE tools for AVR.

Course: Control System Engineering

Course Code: (6ET2)

At the end of Control System Engineering course the student will be able:

- CO 1:** To analyze feedback control system, physical system design.
- CO 2:** To formulate a transfer function for the static and dynamic response.
- CO 3:** To analyze the stability using Routh Hurwitz Criteria to plot the root locus of the system
- CO 4:** To determine Stability using Bode plot, polar plot and Nyquist plot.
- CO 5:** To illustrate the state model of the system using state and canonical variable.
- CO 6:** To differentiate Z transform, inverse Z transform and Bilinear Transformation for system.

Course: Digital Communication

Course Code: (6ET3)

At the end of Digital communication course the student will be able:

- CO 1:** To describe digital communication system & line coding techniques.
- CO 2:** To analyze information theory & apply encoding methods at source, channel.
- CO 3:** To understand the band pass modulation & demodulation techniques.
- CO 4:** To explain and analyze pulse shaping criteria & equalization.

CO 5: To apply error control coding on channel encoders & decoders.

CO 6: To explain multiple access schemes and spread spectrum systems.

Course: Digital Signal Processing

Course Code: (6ET4)

At the end of Digital Signal Processing course the student will be able:

CO 1: To understand fundamental concepts of DSP and various operations of performed on discrete signals

CO 2: To solve different equations using Z transforms.

CO 3: To explain the properties and applications of Fourier transform

CO 4: To design various digital filters.

CO 5: To analyze analog filters and understand techniques to convert it into digital filters.

CO 6: To describe Multirate DSP and its applications.

Course: Consumer Electronics

Course Code: (FE6ET5)

At the end of Consumer Electronics course the student will be able:

CO 1: To explain types of microphones, loudspeakers, speaker baffle and enclosures.

CO 2: To describe the basic of color, black and white Television System

CO 3: To explain Domestic Appliances like Washing Machine, FAX machine, Microwave Oven.

CO 4: To understand Disc and Magnetic Tape recording system, Video Disc recording

CO 5: To describe the working of SMPS, UPS, Set Top Box, Bar Codes, and ATM.

CO 6: To understand the working of calculators and In-Car Computers

