



Electronics And Communication Engineering

II Year-I Sem

SIGNALS AND SYSTEMS

(EC304PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Differentiate various signal functions.
- 2) Represent any arbitrary signal in time domain and frequency domain.
- 3) Represent any arbitrary signal in frequency domain
- 4) Understand the characteristics of linear time invariant systems.
- 5) Analyze the signals with different transform technique

NETWORK ANALYSIS AND TRANSMISSION LINES

(EC302PC)

Course Outcomes:

Upon successful completion of the course, students will be able to:

- 1) Gain the knowledge on basic RLC circuits behavior.
- 2) Analyze the Steady state analysis of RLC Circuits.
- 3) Analyze the transient analysis of RLC Circuits
- 4) Know the characteristics of two port network parameters.
- 5) Analyze the transmission line parameters and configurations.



DIGITAL SYSTEM DESIGN

(EC303PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Understand the numerical information in different forms
- 2) Understand Boolean Algebra theorems
- 3) Postulates of Boolean algebra and to minimize combinational functions
- 4) Design and analyze combinational and sequential circuits
- 5) Known about the logic families and realization of logic gates.

ELECTRONIC DEVICES AND CIRCUITS LAB

(EC306PC)

Course Outcomes:

- 1) Learn the characteristics of basic electronic devices.
- 2) Learn the Characteristics of UJT
- 3) Learn the Characteristics of FET
- 4) Learn about Power amplifiers.
- 5) Learn about Differential amplifiers CO6 :To understand the concepts of simulation by using Spice tool

ELECTRONIC DEVICES AND CIRCUITS

(EC301PC)

Course Outcomes:

Upon completion of the Course, the students will be able to:

- 1) Know the characteristics of various components.
- 2) Understand the utilization of components.
- 3) Understand the biasing techniques
- 4) Design small signal amplifier circuits.
- 5) analyze small signal amplifier circuits



BASIC SIMULATION LAB

(EC308ES)

Course Outcomes:

Upon completing this course, the students will be able to

- 1) Generate, analyze and perform various operations on Signals/Sequences both in time and Frequency domain
- 2) Analyze and Characterize Continuous and Discrete Time Systems both in Time and Frequency domain along with the concept of Sampling
- 3) Generate different Random Signals and capable to analyze their Characteristics

DIGITAL SYSTEM DESIGN LAB

(EC307PC)

Course Outcomes:

Upon completing this course, the students will be able to

- 1) Acquire the knowledge on numerical information in different forms and Boolean Algebra theorems.
- 2) Define Postulates of Boolean algebra and to minimize combinational functions, and design the combinational circuits.
- 3) Design and analyze sequential circuits for various cyclic functions.
- 4) Characterize logic families and analyze them for the purpose of AC and DC parameters.

PROBABILITY THEORY AND STOCHASTIC PROCESSES

(EC305ES)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Understand the concepts of Random Process and its Characteristics.
- 2) Understand the response of linear time Invariant system for a Random Processes.
- 3) Determine the temporal characteristics of Random Signals.
- 4) Determine the Spectral characteristics of Random Signals
- 5) Understand the concepts of Noise in Communication systems.



CONSTITUTION OF INDIA

(*MC309/*MC409)

Course Outcomes:

Students will be able to:

- 1) Discuss the growth of the demand for civil rights in India for the bulk of Indians before the
- 2) Arrival of Gandhi in Indian politics.
- 3) Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
- 4) Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution
- 5) Discuss the passage of the Hindu Code Bill of 1956.

Principal



Electronics And Communication Engineering

II Year-II Sem

ELECTROMAGNETIC FIELDS AND WAVES

(EC402PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Get the knowledge of Basic Laws, Concepts and proofs related to Electrostatic Fields
- 2) Get the knowledge of Basic Laws, Concepts and proofs related to Magnetostatic Fields.
- 3) Distinguish between the static and time-varying fields, establish the corresponding sets of Maxwell's Equations and Boundary Conditions.
- 4) Analyze the Wave Equations for good conductors, good dielectrics and evaluate the UPW Characteristics for several practical media of interest.
- 5) To analyze completely the rectangular waveguides, their mode characteristics, and design waveguides for solving practical problems.

ELECTRONIC CIRCUIT ANALYSIS

(EC405PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Design the multistage amplifiers and understand the concepts of High Frequency Analysis of Transistors.
- 2) Utilize the Concepts of negative feedback to improve the stability of amplifiers and positive feedback to generate sustained oscillations
- 3) Design and realize different classes of Power Amplifiers and tuned amplifiers useable for audio and Radio applications.
- 4) Design Multivibrators and sweep circuits for various applications.
- 5) Design sweep circuits for various applications



LAPLACE TRANSFORMS, NUMERICAL METHODS AND COMPLEX VARIABLES

(MA401BS)

Course Outcomes:

After learning the contents of this paper the student must be able to

- 1) Use the Laplace transforms techniques for solving ODE's .Find the root of a given equation.
- 2) Estimate the value for the given data using interpolation
- 3) Find the numerical solutions for a given ODE's
- 4) Analyze the complex function with reference to their analyticity, integration using Cauchy's integral and residue theorems.
- 5) Taylor's and Laurent's series expansions of complex Function

LINEAR IC APPLICATIONS

(EC404PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) A thorough understanding of operational amplifiers with linear integrated circuits.
- 2) Attain the knowledge of functional diagrams
- 3) applications of IC 555
- 4) applications of IC 565
- 5) Acquire the knowledge about the Data converters



IC APPLICATIONS LAB

(EC407PC)

Course Outcomes:

Upon completing this course, the student able to

- 1) Design and implementation of various analog circuits using 741 ICs.
- 2) Design and implementation of various Multivibrators using 555 timer.
- 3) Design and implement various circuits using digital ICs.
- 4) Design and implement ADC, DAC and voltage regulators.

ELECTRONIC CIRCUIT ANALYSIS LAB

(EC408PC)

Course Outcomes:

Upon completing this course, the students will be able to

- 1) Design power amplifiers and find its efficiency
- 2) Design tuned amplifiers and find its Q-factor
- 3) Design various multivibrators and sweep circuits. Understand the necessity of linearity
- 4) Design sampling gates and understanding the concepts of frequency division

ANALOG AND DIGITAL COMMUNICATIONS LAB

(EC406PC)

Course Outcomes:

Upon completing this course, the student able to:

- 1) Design and implement various Analog modulation and demodulation Techniques and observe the time and frequency domain characteristics
- 2) Design and implement various Pulse modulation and demodulation Techniques and observe the time and frequency domain characteristics
- 3) Apply different types of Sampling with various Sampling rates and duty Cycles
- 4) Design and implement various Digital modulation and demodulation Techniques and observe the waveforms of these modulated Signals practically



ANALOG AND DIGITAL COMMUNICATIONS

(EC403PC)

Course Outcomes:

Upon completing this course, the student will be able to

- 1) Analyze and design of various continuous wave and angle modulation and demodulation techniques
- 2) Understand the effect of noise present in continuous wave and angle modulation techniques.
- 3) Attain the knowledge about AM , FM Transmitters and Receivers
- 4) Analyze and design the various Pulse Modulation Techniques.
- 5) Understand the concepts of Digital Modulation Techniques and Baseband transmission.

GENDER SENSITIZATION LAB

(*MC409/*MC309)

Course Outcomes:

- 1) Students will have developed a better understanding of important issues related to gender in contemporary India.
- 2) Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
- 3) Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.
- 4) Students will acquire insight into the gendered division of labour and its relation to politics and economics.
- 5) Men and women students and professionals will be better equipped to work and live together as equals.
- 6) Students will develop a sense of appreciation of women in all walks of life.
- 7) Through providing accounts of studies and movements as well as the new laws that provide protection and relief to women, the textbook will empower students to understand and respond to gender violence.

Principal