



DEPARTMENT OF ELECTRONICS

COURSE OUTCOMES

S. NO	DEPARTMENT	COURSE CODE	COURSE NAME	CO NUMBER	COURSE OUTCOMES
1	ELECTRONICS		BASIC CIRCUIT THEORY	1	Apply the knowledge of basic circuit laws and simplify the dc and ac networks using reduction techniques.
				2	Analyze the dc and ac circuits using mesh and nodal analysis and network simplification theorems. Analyze the series and parallel resonant circuits.
				3	Infer and evaluate transient response, steady state response of series, parallel and compound circuits.
				4	Develop Laplace transformed network for steady state and transient analysis.
				5	Analyze dc and ac circuits and time domain response using P-Spice..
	ELECTRONICS		ELECTRONIC DEVICES AND CIRCUITS	1	Ability to analyze PN junctions in semiconductor devices under various conditions.
				2	Ability to design and analyze simple rectifiers and voltage regulators using diodes. Ability to describe the behavior of special purpose diodes.
				4	Ability to design and analyze simple BJT and MOSFET circuits.
				1	Have a thorough understanding of the fundamental concepts and techniques used in digital electronics
	ELECTRONICS		DIGITAL ELECTRONICS	2	To understand and examine the structure of various number systems and its application in digital design.
				3	The ability to understand, analyze and design various combinational and sequential circuits.
				4	Ability to identify basic requirements for a design application and propose a cost effective solution
				5	The ability to identify and prevent various hazards and timing problems in a digital design.
				6	To develop skill to build, and troubleshoot digital circuits.
	ELECTRONICS		ANALOG AND DIGITAL IC APPLICATIONS	1	Understand the basic building blocks of Op-Amp.
				2	Illustrate DC and AC performance characteristics of Op-amp
				3	Analyze linear and non-linear applications of Op-Amp.
				4	Analyze the operation & characteristics of data converters.
				5	Examine various 74XX ICs.

				3	Student will be able to understand the concept of flow control, error control and LAN protocols; to explain the design of, and algorithms used in, the physical, data link layers.
				4	Student will understand the working principles of LAN and the concepts behind physical and logical addressing, subnetting and supernetting.
				5	Student shall understand the functions performed by a Network Management System and to analyze connection establishment and congestion control with respect to TCP Protocol.
				6	Student shall understand the principles and operations behind various application layer protocols like HTTP, SMTP, FTP.

DEPARTRMENT OF ELECTRONICS PSO'S:

- **PO1**
Utilize the basic knowledge in mathematics, science and engineering in Electronics and Communication Engineering field.
- **PO2**
Identify, formulate and solve complex problems to achieve demonstrated conclusions using mathematical principles and engineering sciences.
- **PO3**
Design system components that meet the requirement of public safety and offer solutions to the societal and environmental concerns.
- **PO4**
Apply research based knowledge to design and conduct experiments, analyze, synthesize and interpret the data pertaining to Electronics and Communication Engineering problems and arrive at valid conclusions.
- **PO5**
Construct, choose and apply the techniques, resources and modern engineering tools required for Electronics and Communication Engineering applications.
- **PO6**
Apply the contextual knowledge to assess societal, health, safety and cultural issues and endure the consequent responsibilities relevant to the professional engineering practice.
- **PO7**
Examine the impact of engineering solutions in global and environmental contexts and utilize the knowledge for sustained development.
- **PO8**
Develop consciousness of professional, ethical and social responsibilities as experts in the field of Electronics and Communication Engineering.
- **PO9**
Perform effectively as a member/leader in multidisciplinary teams.
- **PO10**
Communicate the engineering activities to engineering society for documentation and presentation.
- **PO11**
Demonstrate knowledge and understanding of the engineering and management principles to manage projects in multidisciplinary environment.
- **PO12**
Demonstrate resourcefulness for contemporary issues and lifelong learning.