UG Electronics PO, PSO & CO

PROGRAMME OUTCOME:

➢ This program provides basic knowledge in mathematics, science and technology related to

Electronics field.

➢ Capability to design a System to meet user demand in Electronics technologic field.

➢ Strengthen the candidate to communicate technically effective in solving technical research and development issues.

➢ Capability to work effectively as an individual, and as a member or leader in teams, or in multidisciplinary domain.

➢ Encourage graduates to be good human beings and responsible citizen.

PROGRAMME SPECIFIC OUTCOME

➢ provides the capacity to apply the technical concepts of Electronics in the design, development and implementation of application oriented real time systems.

➢ Provides ability to solve complex problems in Electronics domain using hardware and software tools,
➢ Ability to acquire social and environmental awareness with ethical responsibilities to have a successful career in real-world

COURSE OUTCOMES

EL-101T and EL-101P BASIC ELECTRONICS:

 Understand the V-I characteristics of semiconductor devices. Analyze dc and ac response of RC, RL and RLC circuits. Solving the networks using different theorems. Understanding the basics of BJT .Know the number systems and binary codes

 EL-201T and El201P ELECTRONIC CIRCUITS AND SPECIAL PURPOSE DEVICES:

Study about the multistage amplifier using BJT and FET in various configuration to determine frequency response and concept of voltage gain. Understand different power amplifier circuits and its applications. Know the concept of feedback amplifier and their characteristics. Design and build different oscillator circuits for various frequencies.

EL-301T and EL301P LINEAR INTEGRATED CIRCUITS AND 'C' PROGRAMMING:

 Understand the basics and areas of applications for the integrated circuits. Study of OP-AMP circuits and their applications. Study of C program and its implementation in Electronics design.

EL-401T and EL401P DIGITAL ELECTRONICS AND VERILOG:

Understanding Boolean algebra and logic gates. Knowing the the difference between combinational and sequential logic circuits. Design and build the digital circuits by simplification of Boolean expressions. Study of application of combinational and sequential circuits. Explores the functionality of the digital circuits practically by coding the design using Verilog-HDL.

EL-501T and EL501P COMMUNICATION-I:

Study of different blocks in communication system and how noise affects communication using different parameters. Study of different modulations, with their advantages, disadvantages and applications. Analysis of the radiation mechanisms of antennas. Demonstrate knowledge of antennas in communication systems. Understand the fundamental concepts of television transmitter and receiver systems.

EL-502T and EL502P MICROPROSSESOR and ELECTRONIC INSTRUMENTATION;

To understand the basic architecture of 8- bit microprocessors. writing programs of 8085 microprocessor. Study of interfacing of peripherals to 8085. Knowing the different sensors and its applications. Learning the requirements of biomedical transducers and their use in medical instruments such as EEG, ECG and EMG.

EL-601T and EL601P COMMUNICATION-II:

Understanding the basics of information theory, source coding techniques. Study to describe and determine the performance of different error control coding schemes for the reliable transmission of digital representation of signals and information over the channel. Understanding of the basics of satellite communication and use of satellite system for the benefit of society. List and compare personal area network (PAN) technologies such as Zigbee, Bluetooth etc.Understanding GSM, CDMA concepts, architecture, frame structure, system capacity and services. Study of evolution of mobile communication generations 2G, 2.5G, and 3G with their characteristics and limitations.

EL-602T and EL602P MICROCONTROLLERS and Project work :

Understanding the architecture of 8051 microcontroller and programs for 8051 microcontroller. To design the interfacing for 8051 microcontroller Using C code. To get ability to develop a project using microcontrollers.