

COURSE OUTCOME B.Sc. Electronics ELE-100 Electronics Devices and Circuits At the end of this Course, student will have developed the ability to:	
CO-1	Understand a regulated power supply using rectifiers and filters.
CO-2	Learn transistor biasing circuit for class A, B, AB and C amplifier.
CO-3	Analyse a system as per the requirements and specifications.
CO-4	Learn about FET/MOSFET as amplifier.

COURSE OUTCOME B.Sc. Electronics ELE-111 Analog Fundamentals - EDA At the end of this Course, student will have developed the ability to:	
CO-1	Define the basic laws in circuit analysis and identify and state the role and functions of various electronic components.
CO-2	Understand the working of diode, transistor and apply the same to build dc power supplies and transistor amplifiers.
CO-3	Design filters and Oscillators using Op-Amp.
CO-4	Develop skills in using EDA tools and analyse the performance of Analog circuits using EDA tools.

COURSE OUTCOME B.Sc. Electronics ELE-141 Electronics for Beginners At the end of this Course, student will have developed the ability to:	
CO-1	Understand the basics of Electronics.
CO-2	Learn to draw schematics and also the implement the circuit on breadboards.
CO-3	Implement electronics circuits of practical use.
CO-4	Modify the implemented electronics circuits for some applications.

COURSE OUTCOME B.Sc. Electronics ELE-131 Introduction to Electricity At the end of this Course, student will have developed the ability to:	
CO-1	Understand basics of electrical components.
CO-2	Understand electrical wiring and safety measures.
CO-3	Understand lighting and its applications
CO-4	Apply the knowledge and techniques to design wiring and lightning for housing and commercial setup.
CO-5	Get self-employed in ever growing battery industry

COURSE OUTCOME B.Sc. Electronics ELE-132 Repair and Maintenance of Domestic Electrical appliances At the end of this Course, student will have developed the ability to:	
CO-1	Acquire the basic knowledge of electricity and domestic wiring.
CO-2	Understand the working of basic electrical appliances and their safety precautions.
CO-3	Able to do repair and maintenance of the basic electrical appliances.
CO-4	Able to do repair and maintenance of the motorized and heating type electrical appliances.

COURSE OUTCOME B.Sc. Electronics ELE-142 PCB Designing and Fabrication At the end of this Course, student will have developed the ability to:	
CO-1	Explain and describe the steps involved in schematic, layout, fabrication, and assembly process of PCB design.
CO-2	Able to design a single- and double-layer PCB
CO-3	Able to fabricate the single land double layer PCB.
CO-4	Able to design and troubleshoot the circuit over PCB.
CO-5	Able to design his own circuit for any application.

COURSE OUTCOME B.Sc. Electronics ELE-161 CCTV Installation At the end of this Course, student will have developed the ability to:	
CO-1	Understand basics of Network & CCTV Technology.
CO-2	Install CCTV System
CO-3	Maintain of CCTV systems.
CO-4	Student can take some installation under guidance of lecture/ entrepreneur.

COURSE OUTCOME B.Sc. Electronics ELE-200 Basic Circuit Theory and Network Analysis At the end of this Course, student will have developed the ability to:	
CO-1	Explain classification of electrical network circuits and theorems
CO-2	Understand the Laplace transforms and s-domain analysis
CO-3	Learn the transient response, dc response of RLC networks and different two-port networks
CO-4	Apply the knowledge of basic circuit law to simplify the networks using network theorems.

COURSE OUTCOME B.Sc. Electronics ELE-201 Linear Integrated Circuits At the end of this Course, student will have developed the ability to:	
CO-1	Understand the applications of Op-Amp in linear electronic circuits.
CO-2	Analyse the various configurations of Op-Amp
CO-3	Learn the filters and oscillators used in various electronic circuits
CO-4	Learn to troubleshoot specified applications using various linear ICs

COURSE OUTCOME B.Sc. Electronics ELE-211 Digital Fundamental- EDA At the end of this Course, student will have developed the ability to:	
CO-1	Explain classification of digital electronic circuits, the logic gates and logic families.
CO-2	Understand Boolean algebra and apply to design, analyse and build various digital circuits
CO-3	Learn to Build the sequential circuits and understand the analog and digital converters
CO-4	Develop skills in using EDA tools and analyse the performance of digital circuits using EDA tools.

COURSE OUTCOME B.Sc. Electronics ELE-231 Computer Troubleshooting and Maintenance At the end of this Course, student will have developed the ability to:	
CO-1	Acquire knowledge of Finding Faults in Components
CO-2	Install, Configure and maintain various components in computer systems and peripherals.
CO-3	Diagnose faults of Different Component
CO-4	Repair and maintain computer systems and its peripherals.

COURSE OUTCOME B.Sc. Electronics ELE-241 PLC and HMI At the end of this Course, student will have developed the ability to:	
CO-1	Understand working principle PLC, HMI.
CO-2	Understand working principle DCS and SCADA.
CO-3	Develop necessary skill to implement consumer and industrial based applications using PLC.
CO-4	Develop PLC based applications for various appliances and devices.

COURSE OUTCOME B.Sc. Electronics ELE-202 8085- Microprocessor At the end of this Course, student will have developed the ability to:	
CO-1	Understand the basics of Microprocessor Architecture.
CO-2	Analyze addressing modes, Instruction categories, memory mapping.
CO-3	Develop assembly programs using Microprocessor.
CO-4	Build a microprocessor system to interface devices.
COURSE OUTCOME B.Sc. Electronics ELE-203 Transducers and Instrumentation At the end of this Course, student will have developed the ability to:	
CO-1	Explain the Performance characteristics and compare the various types of standards used in measurements.
CO-2	Explain the working principle of various transducers.
CO-3	Explain the working principle of instruments used in electrical and electronics laboratory.
CO-4	Design hardware circuits for amplification and Signal Conditioning of Signal from Source

COURSE OUTCOME B.Sc. Electronics ELE-204 Electronic Communication At the end of this Course, student will have developed the ability to:	
CO-1	Remember and recognize important terms, ideas and technologies in communication and navigation systems learned during the course.
CO-2	Explain the working of various electronic communication techniques, and understand the importance of modulation and the working of navigation systems.
CO-3	Analyze communication systems, apply techniques to modulate and demodulate signals.
CO-4	Design Circuits for modulation of signal for various applications.

COURSE OUTCOME B.Sc. Electronics ELE-205 Programming in C At the end of this Course, student will have developed the ability to:	
CO-1	Define and explain fundamental programming concepts, and apply them to write programs in C.
CO-2	Develop skills for writing an algorithm and translating in C program to solve a given problem in structured manner.
CO-3	Develop skills for writing an algorithm and translating in C program with Control Flow Statements.
CO-4	Develop skills for writing an algorithm and translating in C program with Pointers and Structures.

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ELE-221 Robotics

At the end of this Course, student will have developed the ability to:

CO-1	Explain the basic concepts in robotics and constituents of the robotic system
CO-2	Explain the various sensors and actuators to be used to develop robot applications
CO-3	Develop robotic systems for various interfaces.
CO-4	Develop robotic systems for various applications.

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ELE-261 Repair and Maintenance of Electrical and Electronics equipment

At the end of this Course, student will have developed the ability to:

CO-1	Understand the technical specifications of the equipment.
CO-2	Analyze and understand the working principle of electrical and electronic equipment.
CO-3	Identify the common faults that occur in electrical and electronic equipment.
CO-4	Carry out minor repairs in the equipment.