

Programme Outcomes: B.Sc Electronics & computer Maintenance

PO1: The ability to apply knowledge of mathematics, Electronics and Computer fundamentals and technology specific solution to complex problems in electronic circuits, communication systems and computer applications.

PO2: The ability to design experiment as well as to analyze and interpret data.

PO3: The ability to design system components or process to meet desired needs within realistic constraints such as economic, environmental, social, ethical health and safety ability and sustainability.

PO4: The ability to function as a team and multidisciplinary set up.

PO5: The ability to identify, formulate and solve complex problems.

PO6: To understand professional and ethical responsibility.

PO7: The ability to communicate effectively.

PO8: Broad education necessary to understand the impact of technology solution in a global economic, environmental and societal context.

PO9: A recognition of the need for and an ability to engage in lifelong learning.

PO10: An ability to use the technical skills in modern science practice.

PO11: A knowledge of contemporary issues.

PO12: An ability to manage projects or as a member or as a team lead..

B.Sc Electronics & computer Maintenance Course Outcomes 2018-19

Semester :FIRST

Basic Electronics

CO1: Study the concepts of Electricity & Magnetism.

CO2: Study the fundamentals of AC circuits

CO3: Study and analyze the behavior of semiconductor devices.

CO4: To study basics of semiconductor & devices and their applications in different areas.

CO5: Characterize the current flow of a bipolar transistor in CB, CE and CC configurations.

CO6: To understand the basics of Power Electronics.

CO7: To learn the details of power semiconductor switches (Construction, Characteristics and operation).

Semester:SECOND

Electronic Circuits

CO1: Design half wave and full wave rectifiers with filters

CO2: Bias the transistors and FETs for amplifier applications.

CO3: Know the concept of feedback amplifier and their characteristics.

CO4: CO: Design the different oscillator circuits for various frequencies.

CO5: Know about different power amplifier circuits, their design and use in electronics and communication circuits.

CO6: Analyze and solve different wave shaping electric circuits.

Semester:THIRD

Analog Communication

CO1: Understand different blocks in communication system and how noise affects communication using different parameters.

CO2: Analyze transmitter and receiver circuits.

CO3: Distinguish between different amplitude modulation schemes with their advantages, disadvantages and applications.

CO4: Analyze generation and detection of FM signal and comparison between amplitude and angle modulation schemes.

CO5: Use of different modulation and demodulation techniques used in analog communication.

CO6: Identify different radio receiver circuits and role of AGC.

Semester:FOURTH

On The Job Training

CO1: To develop technical skill in students.

CO2: Hands on training in a specialized topic.

CO3: Equip students for self employment.

Semester:SIXTH

Project Lab

CO1:Enable the students to undertake short research projects in a team under the direction of members of the faculty.

CO2:To impart skills in preparing detailed report describing the project and results.

CO3:To enable the students to undertake fabrication work of new experimental set up/devices or develop software packages.

CO4:To effectively communicate by making an oral presentation before an evaluation committee.

Satellite Communication

CO1: Explain the basics of satellite communication

CO2: Understand the orbital and functional principles of satellite communication systems.

CO3: Analyse and evaluate a satellite link and suggest enhancements to improve the link performance.

CO4: Select an appropriate modulation, multiplexing, coding and multiple access schemes for a given satellite communication link.

CO5: Architect, interpret, and select appropriate technologies for implementation of specified satellite communication systems

CO6: Use the different application of satellite communication

Optoelectronics

CO1:Understand fundamental properties of light and operation principles of basic optical components. 2CO2: Demonstrate a mastery of basic mechanisms of light generation (including lasers) through detailed understanding and analysis of operation principles, characteristics, design architectures and trade-offs of semiconductor lasers.

CO3. Understand and compare operation principles, characteristics, design architectures and trade-offs of optical detectors and modulators of light.

CO4: Understand basic system design of fiber optic communication link and fundamental theory of fiber optics.