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| **Sl. No** | **Syllabus** | **Curriculum** | **Deployment Strategy and**  **Tool** | **Cross-cutting issues**  **integrated** | **PO, PSO and CO** | **Attainment Verification** |
| 1. | ANALOG AND DIGITAL ELECTRONICS | * Students get knowledge of how our world is powered through electrical means. * Electronic circuits work to process and transmit electrical current information in our computers, TVs,­ ­radios, and mobile devices. Integrated circuits help manage power in our mobile devices. These are known as power management integrated circuits (PMICs) and are used mainly in mobile devices to lessen the required amount of space. * Learning about circuits will help students to understand how to analyze circuits that use direct current (DC) or alternating current (AC) voltage. You will learn about open, closed, and short circuits. Anyone who wants to become an electrician, or work in a public utility for electricity will need to know the foundational elements of circuits, resistors, capacitors, and inductors and how they work. | 1. Chalk and   Talk method   1. PPT | * Business   Ethics | PO1:Engineering Knowledge  PO2:Problem Analysis  PO3:Design/Development Of Solutions  PO4:Conduct Investigations Of Complex Problems  PO6: Engineer and Society  PO7:Environment And Sustainability  PO12: Life-long  Learning. |  |
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|  |  | PSO1:Professional Skills  PSO2:Problem Solving Skill |
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|  |  | CO1:Explain the operation of JFETs and MOSFETs, Operational Amplifier circuits and their applications  CO2:Describe and interpret different types of combinational logic circuits by using abridge mapping techniques Viz., Karnaugh Maps, Quine-McClusky method and develop program using HDL to simulate the behaviour of various logical circuits.  CO3:Design and Demonstrate the Operation of Decoders, Encoders, Multiplexers, Adders and Subtractors and develop program using HDL to simulate the behaviour of various logical circuits. in the domain of economy, performance and efficiency  CO4:Design and implement the working of Latches, Flip-Flops, registers, counters and develop program using HDL to simulate the behaviour of various logical circuits within the realm of economic, performance, efficiency, user friendly and environmental constraints  CO5:Demonstrate the fundamental knowledge of analog and digital electronics to get different types of analog to digitalized signal transformation and vice-versa |
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