**19EC31P2 – ANALOG COMMUNICATION LAB**

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| **Course Category:** | | Program Core | | **Credits:** | 1.5 |
| **Course Type:** | | Practical | | **Lecture-Tutorial- Practice:** | 0 - 0 - 3 |
| **Prerequisite:** | | Electronic Devices and Circuits,  Signals and Systems | | **Sessional Evaluation:**  **External Evaluation :**  **Total Marks:** | 40  60  100 |
| **Course**  **Objectives** | Students undergoing this course are expected tounderstand: | | | | |
| 1. The design and analysis of various communication circuits.  2. To study and verify the various modulation techniques. | | | | |
| **Course Outcomes** | Upon successful completion of the course, the students will be able to: | | | | |
| CO1 | | Analyse the electronic circuits experimentally. | | |
| CO2 | | Design & Analyse the Amplitude Modulation and De-Modulation system. | | |
| CO3 | | Study and verify the Mixer Characteristics. | | |
| CO4 | | examine the PAM and PPM practically | | |
| CO5 | | Understand the performance of transmission lines. | | |
| CO6 | | Design & Analyse the Frequency Modulation and De-Modulation system. | | |
| **Course**  **Content** | Minimum of 10 experiments to be completed out of the following:  **LIST OF EXPERIMENTS**   1. Amplitude Modulation. 2. Amplitude De-Modulation. 3. Frequency Modulation. 4. Pulse Amplitude Modulation. 5. Pulse Position Modulation. 6. Pulse Width Modulation. 7. Proto Type Filters. 8. Pre-Emphasis and De-Emphasis. 9. Transmission Lines. 10. FM using Variable Reactance Method. 11. Frequency De-Modulation. 12. Mixer Characteristics. | | | | |

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| **Contribution of Course Outcomes towards achievement of Program Outcomes** | | | | | | | | | | | | | | |
|  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
| CO1 | 3 | 3 | 2 | 2 | 1 | - | - | - | 2 | 2 | - | 2 | 3 | 3 |
| CO2 | 3 | 3 | 2 | 2 | 1 | - | - | - | 1 | 2 | - | 2 | 3 | 2 |
| CO3 | 3 | 3 | 3 | 1 | 1 | - | - | - | - | 2 | - | 2 | 2 | 3 |
| CO4 | 3 | 3 | 2 | 2 | 1 | - | - | - | 2 | 2 | - | 2 | 2 | 3 |
| CO5 | 3 | 3 | 2 | 2 | 1 | - | - | - | 1 | 2 | - | 2 | 3 | 2 |
| CO6 | 3 | 3 | 2 | 2 | 1 | - | - | - | 1 | 2 | - | 2 | 3 | 2 |