1.	Title of the course	Digital Signal Processing Laboratory
2.	Course number	EE209P
3.	Structure of credits (L-T-P-C)	0-0-3-2
4.	New course/modification to	Modified with EE2004/DIGITAL SIGNAL PROCESSING
5.	To be offered by	Electrical Engineering
6.	Prerequisite	None
7.	**Course Objective(s):** To relate the theory and the implementation knowledge of the analysis and characterization of discrete-time signals and systems.	
8.	**Course Content:** Generation of signals and operations on signals, convolution and correlation of signals, properties of Linear Time Invariant (LTI) systems, Discrete Fourier Transform (DFT) and its properties, solving difference equations and Z-transforms, Finite Impulse Response (FIR) filter design, multi-rate signal processing, Short Time Fourier Transform (STFT), application of digital signal processing algorithms to audio signals.	
9.	**Textbook(s):** 1. Oppenheim A V, Schafer R W and Buck J R, Discrete-Time Signal Processing, 3rd Edition, Pearson Education (2014).	
10.	**Reference(s):** 1. Mitra S K, Digital Signal Processing: A Computer-Based Approach, McGraw Hill Education (2013). 2. Proakis J G and Manolakis D K, Digital Signal Processing: Principles, Algorithms and Applications, 4th Edition, Pearson (2006).	