

1.	Title of the course	Analog Circuits Laboratory
2.	Course number	EE207P
3.	Structure of credits (L-T-P-C)	0-0-3-2
4.	New course/modification to	Modified with EE301P/ANALOG CIRCUITS LABORATORY
5.	To be offered by	Electrical Engineering
6.	Prerequisite	None
7.	Course Objective(s): To provide practical knowledge and hands-on experience in designing and testing of analog circuits.	
8.	Course Content: Familiarization of SPICE (Simulation Program with Integrated Circuit Emphasis) based circuit simulators; Diode applications: half wave and full wave rectifiers with filtering and regulation, peak detector, clippers, clampers, voltage doubler and wave-shaping circuits; MOSFET amplifiers: realization of common source, common gate and common drain amplifiers; CMOS inverter; OpAmp based circuits; Designing and testing of analog circuits such as amplifiers, voltage regulators, filters, oscillators and mixers with an emphasis on negative feedback, transfer functions, frequency response, stability, frequency compensation and step response.	
9.	Textbook(s): 1. Sedra A S and Smith K C, Microelectronic Circuits: Theory and Applications, 7th Edition, Oxford (2017). 2. Razavi B, Fundamentals of Microelectronics, 3rd Edition, Wiley (2021).	
10.	Reference(s): 1. Razavi B, Design of Analog CMOS Integrated Circuits, 2nd Edition, McGraw Hill (2017).	