

1.	Title of the course	Analog VLSI Design
2.	Course number	EE530L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To EE5041/16
6.	To be offered by	Department of Electrical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	<b>Course Objective(s):</b> To introduce various concepts in analog circuit design, their analysis and simulation of the analog circuits.	
10.	<b>Course Content:</b> Introduction to analog circuit design; Noise and mismatch in analog design; Advanced concepts in negative feedback; One-stage opamps, two-stage opamps, compensation; Fully differential opamps; Phase-locked loops, bandgap references, switched capacitor circuits.	
11.	<b>Textbook(s):</b> 1. Razavi B, <i>Design of analog CMOS integrated circuits</i> , 2nd Edition, McGraw Hill Education (2017). 2. Sedra A S, Smith K C and Chandorkar A N, <i>Microelectronic circuits: theory and applications</i> , 5th Edition, Oxford University Press (2017).	
12.	<b>Reference(s):</b> 1. Allen P E and Holberg D R, <i>CMOS analog circuit design</i> , 3rd Edition, Oxford University Press (2013). 2. Gray P R, Hurst P J, Lewis S H and Meyer R G, <i>Analysis and Design of analog integrated circuits</i> , 4th Edition, Wiley India (2018).	