

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI
PROFORMA FOR NEW COURSE

1.	Title of the Course	Analog Circuits Laboratory
2.	Course Number	EE3191
3.	Status of the Course	Core
4.	Structure of Credits	0-0-3-2
5.	Offered To	UG
6.	New Course/Modification to	New
7.	To be Offered by	Department of Electrical Engineering
8.	To take effect from	July 2018
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	Course Objective: The objective of this course is to provide students with sufficient fundamental practical knowledge in analog integrated circuits.	
12.	Course Content: The Lab has experiments based on 1. Familiarization of SPICE based Software. 2. Diodes: clippers, clampers, voltage doubler and peak detector. 3. Negative feedback amplifiers, instrumentation amplifier. 4. Precision rectifiers, integrators and differentiators with their frequency response. 5. Characteristics of CE, CC, CB amplifiers. 6. Frequency response of CE amplifier, transistor as a switch. 7. MOSFET as an amplifier with their frequency response 8. Oscillators 9. Voltage regulators 10. Filters	
13.	Text book(s): 1. Sedra A and Smith K, <i>Microelectronic circuits: theory and applications</i> , Oxford (2017).	
14.	Reference(s): 1. Boylestad R L and Nashelsky L, <i>Electronic devices and circuit theory</i> , Pearson (2009).	