



We Make You Shine

St. JOSEPH'S INSTITUTE OF TECHNOLOGY

St. Joseph's Group of Institutions

Jeppiaar Educational Trust

OMR, Chennai - 119.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Circuits and Innovation Lab

S.NO	Subject Domain	Contents Covered	Platform
1	Basic Electronics	EXPERIMENTS ON RESISTIVE CIRCUITS a) Thevenin's theorem b) Norton's theorem Verification of Maximum power transfer Theorem b) Verification of Superposition Theorem	E- Content in College Website /Portal https://drive.google.com/drive/folders/11ItnsvoPurDJZs-Yj2EIW-jW8UfCbab?usp=sharing
2	Analog Circuits	a) Analysing the output characteristic of BJT in PSpice Simulation tool b) Single Stage BJT in Common Emitter configuration with Voltage Divider Bias c) Voltage Divider Bias Common Source Amplifier using PSpice Simulation Tool d) Fixed Bias Common Emitter Amplifier using Pspice simulation e) Cascode Amplifier using Pspice Simulation tool	E- Content in College Website /Portal https://drive.google.com/drive/folders/1Cm7DqC6exiyckBLdKxK74dZqf72TGk1C?usp=sharing and Additional resources: 1. https://he-coep.vlabs.ac.in/List%20of%20experiments.html 2. http://vlabs.iitkgp.ernet.in/be/exp13/index.html
3	Digital Circuits	1. Implementation of Boolean Functions using MUX 2. To study the J-K FF and conversion of D and T flip flop to JKFF. 3. TTL NAND Gate	https://drive.google.com/drive/folders/1VJQ7t-IUPSFTb7n3k9UmmHyXZIZSAyN7?usp=sharing 3. https://de-iitg.vlabs.ac.in/exp/boolean-functions-using-mux/
4	Linear Circuits	OPERATIONAL AMPLIFIER APPLICATIONS a) Inverting Amplifier b) Summer Circuit c) Non-inverting Amplifier d) Voltage follower Circuit e) Difference Amplifier	E- Content in College Website /Portal https://drive.google.com/drive/folders/1LebjGDEvECr82QdhKhnnJ_zPLcpwq0Ra?usp=sharing
5	Arduino	1. Learning Arduino through TinkerCad Circuits	E- Content in College Website /Portal

2. Arduino desktop IDE to Arduino UNO programming
3. Constructing a simple sensor-based input and feedback loop
4. Interfacing an LCD display circuit using Arduino

<https://drive.google.com/drive/folders/115z3DjhY-xoLQrCgYA3x3W3jVGu1js7U?usp=sharing>
And & <https://spoken-tutorial.org>

