

## ANALOG CIRCUITS LABORATORY

**Objective:** The objective of this laboratory is to link the theoretical concepts of different analog electronics circuits with practical feasibility thereby giving them a scope to learn basic electronics circuits and their different electrical characteristics in a better way.



### Sections Handled:

B.Tech III Year I Semester – Linear IC applications lab - ECE - A&B Sections

B.Tech II Year II Semester – Electronic circuits lab - ECE - A&B Sections

### Major Equipment Details:

S.No	Equipment Name	Qty	Cost
1	Digital IC trainer kit	1	8855.00

**Faculty Lab In charge with qualification:** Mrs.Y.Naga Prsanthi, M.Tech

**Lab Technician name with qualification:** Mrs.D.Ramya, B.Tech

### Experiment list as per curriculum:

1. Study of ICs – IC 741, IC 555, IC 565, IC 566, IC 1496 – functioning, parameters and Specifications.
2. OP AMP Applications – Adder, Subtractor, Comparator Circuits.
3. Integrator and Differentiator Circuits using IC 741.
4. Active Filter Applications – LPF, HPF (first order)
5. Active Filter Applications – BPF, Band Reject (Wideband) and Notch Filters.
6. IC 741 Oscillator Circuits – Phase Shift and Wien Bridge Oscillators.
7. Function Generator using OP AMPs.
8. IC 555 Timers – Monostable Operation Circuit.
9. IC 555 Timers – Astable Operation Circuit.
10. Schmitt Trigger Circuits – using IC 741 and IC 555.
11. Voltage Regulator using IC 723.
12. Three Terminal Voltage Regulators – 7805, 7809, 7912.
13. 4 bit DAC using OP AMP.
14. PLL - IC 565
15. VCO- IC 566

### Experiment list beyond the curriculum

1. Designing of V to I Convertor using 741 IC
2. Precision Rectifier designing using 741 IC