Electronics Laboratory

Programme: M. Sc. (Physics)	Year: 1st	Semester: 1st
Course: Program Core	Credits: 4	Hours: 9 hrs. per week

List of experiments:

1. Design and study of single and two stage R-C coupled amplifiers (Frequency response and bandwidth)
2. Design and study of negative feedback amplifier (Voltage gain, frequency response and bandwidth)
3. Design and study of full wave rectifier (no filter, C-filter, L filter and □-filter)
4. Design and study of Op-Amp based inverting and non-inverting amplifier with frequency response
5. Study of basic configuration of OPAMP (IC-741), simple mathematical operations and its use as comparator and Schmitt trigger
6. Differentiator and Integrator using OPAMP (IC-741)
7. Design of low pass, high pass and band pass filters using OPAMP (IC-741)
8. Phase shift oscillator using OPAMP (IC-741)
9. Design and study of astable and monostable multivibrators using IC 555
10. Design and study of Hartley and colpitt Oscillators (wave forms and determination of frequency).
11. Design and study of Wien Bridge oscillators using OPAMP (IC-741)
12. Design and study of Clipping and Clamping circuits