VEER NARMAD SOUTH GUJARAT UNIVERSITY  
M.Sc(Tech) - I  
Instrumentation  

LABORATORY WORK  

( 09 Hours / week)

Group - A : 3 Hours / week

1. Experiments to familiarize the use of instruments and techniques for measurement, double ended plug gauge, plain ring gauge, plug gauge in a
2. Experiments to familiarise the use of instruments and techniques for measurement of temperature, pressure etc.

Group – D  Project work

Group – B : 3 Hours / week

1. Familiarization with various active and passive components.
2. Development of soldering skill and making of PCB.
3. To design, build and test two stages R C Coupled amplifier.
4. To design, build and test astable multivibrator.
5. To design, build and test Colpitt's oscillator.
6. Operational amplifier I
7. Operational amplifier II
8. To design, build and test adder, substractor.
9. To design, build and test A to D converter
10. To design, build and test D to A converter
11. To design build and test (i) a 4 bit up counter using JK flip-flops (ii) a Modula N counter using JK flip flips and other gates.
12. Writing and testing different assembly language programmes.

Group – C : 3 Hours / week

1. Experiments with laser kit
2. Experiments with fibre optics kit.
3. Experiments with analytical and environmental instruments.
4. Experiments on vacuum system; case study of design of a High vacuum system, vacuum evaporation and preparation of Mirror conductance and speed of rotatory pump at the vessel measurement of vacuum.
5. Experiments with transducers, L.V.D.T. strain gauge etc.