

Measurements and instrumentation [3 – 0 – 1]

Course #:0904374

Prereq.: 0904328+0904204

Basic concepts, general measurement system, analysis of experimental data, units and error analysis, statistical analysis, Electromechanical indicating instruments, DC/AC meter construction; loading effect; insertion loss, Bridges measurements. A/D converter and D/A converter digital instruments, Oscilloscope, CRT spectrum analyzer and calibration, Transducers and sensors as input Elements to Instrumentation system: photo-electric transducers, photoconductive cell, photodiodes, and photovoltaic cell. Capacitive and inductive transducers. Transducers and sensors: passive and self generating transducers