

## 0402512 Engineering Measurements

(3 Credit hours, Prerequisite 0402211 Advanced Engineering Workshops)

The course aims to introduce the student to the basic principle of measurement science. This includes the following topics: definition of measuring, types of measuring devices, linear displacement, velocity, and acceleration measurements, rotational displacement, velocity, and acceleration measurements, force, torque, pressure, temperature, flow, strain and liquid-level measurements, the concept of accuracy, calibration and standardization, measurement of electrical quantities such as, voltage, current, energy, amplitude, power, frequency, resistance, inductance, using slip gauges and using the mechanical, electrical and light comparators.