

**Faculty of Engineering & Technology**

**Measurements & Instrumentation**

**Information :**

**Course Code :** EED301

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Biomedical Engineering

**Description :**

Introduction to Units, Standards, and Measurements Errors. Electromechanical Instruments and DC meters. Resistance, Inductance and Capacitance measurements and DC/AC bridges. Digital Basic Instruments, Digital counters, A/D & D/A converters. Digital measuring instruments: digital multimeters and frequency meters. Cathode Ray Oscilloscopes and its applications in phase and frequency measurements, Digital Storage Oscilloscopes, Signal Generators and Spectrum Analyzer. Introduction to Sensors: Electromechanical sensors, temperature sensors, light sensors, and biomedical sensors