# EIE 302: Instruction Plan

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| **Lec.**  **No** | **Topic Name** | **Reference** | **Date / Remark** |
| 1 | Introduction to subject |  |  |
| 2 | Classification of Sensors / Transducers |  |  |
| 3 | Heat, Temperature, Temperature Scales and units |  |  |
| 4 | Classification of temperature sensors and transducers, Bimetallic thermometer and thermowell |  |  |
| 5 | Resistance Temperature Detectors |  |  |
| 6 | Thermistors and IC based temperature sensors |  |  |
| 7 | Thermocouples |  |  |
| 8 | Summary of all temperature sensors |  |  |
| 9 | Test 1 |  |  |
| 10 | Temperature transmitters |  |  |
| 11 | Pyrometers |  | Assignment 1 |
| 12 | Understanding of force, pressure, torque, sound and units |  |  |
| 13 | Classification of pressure/force sensors |  |  |
| 14 | Strain gauges |  |  |
| 15 | Strain gauges |  |  |
| 16 | Capacitance pressure sensors |  |  |
| 17 | Dead weight pressure gauge |  |  |
| 18 | Test 2 |  |  |
| 19 | Vaccum measurement |  |  |
| 20 | Sound measurement |  |  |
| 21 | Torque measurement |  |  |
| 22 | Shaft power measurement |  | Assignment 2 |
| 23 | Level Measurement sensors and classification |  |  |
| 24 | Floating level sensors |  |  |
| 25 | Pressure level sensors |  |  |
| 26 | Electrical type level sensors |  |  |
| 27 | Electrical type level sensors |  |  |
| 28 | Electrical type level sensors |  |  |
| 29 | Test 3 |  |  |
| 30 | Flow of fluids, units and classification of flow sensors |  |  |
| 31 | Orifice, venture and rotameter |  |  |
| 32 | Magnetic flow meters & Ultrasonic flow meters |  |  |
| 33 | Coriolis flow meter and Vortex shedding |  |  |
| 34 | Test 4 |  |  |
| 35 | LVDT |  |  |
| 36 | Encoders |  |  |
| 37 | Tachometers |  |  |
| 38 | Humidity and Moisture sensors |  |  |
| 39 | Density and viscosity sensors |  |  |
| 40 | Test 5 |  |  |