

National Institute of Electronics and Information Technology, Aurangabad

COURSE PROSPECTUS

Name of the Group: Communication It and Networking Name of the Course: Advanced Test and Measurement Duration: 1 week Time: 4 hours per day (11 a.m. to 1 p.m. and 2 p.m. to 4 p.m.)

Preamble:

The potential fields of application can be found in every branch of engineering and industry in both virtual and physical test and measurement. It covers sensors, transducers, strain gauges, amplifiers and data acquisition systems as well as tests and analysis.

Objective of the Course:

The course on Advanced Test and Measurement is intended to impart training in testing and various measurement methodologies. Emphasis of the teaching curriculum is on design methodology and practical applications. The course contents have been designed keeping in view the emerging trends in needs for skilled manpower. The curriculum has been designed in consultation with industry and academic experts and our strategic partners, to map the skill sets and design methodologies, which is high in demand at Production plants, Research & development centers and Testing Laboratories.

Outcome of the Course:

This course makes the successful participants readily employable in multiple roles available in broad spectrum of relevant industries. In addition the course also serves as a concrete platform for people involved in consultancy and product testing domain in both industry and academia.

COURSE DESCRIPTION:

- CRO, Function generator, Power supply.
- DMM, Battery, Photo detector circuit Photodarlington transistor pair.
- RTD, LVDT, RVDT, Temperature controller.
- Loadcell, Strain gauge, Temperature Sensors.
- Transducers: Capacitive, Thermister, Thermocouple, Tachometer.

Course Structure:

| CRO, Function generator, Power supply | Day1 |
|---------------------------------------|------|
| DMM, Battery, Photo detector circuit, | Day2 |
| Photo Darlington transistor pair | |
| RTD,LVDT,RVDT, Temperature controller | Day3 |
| Load cell, Strain gauge, Temperature | Day4 |



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| sensors | |
|-------------------------------------|------|
| Transducers: Capacitive, Thermister | Day5 |
| Thermocouple, Tachometer | |

Lab Facilities:-

CRO, Function Generator, Power supply, DMM, Sensors, Transducers.

Other Contents

- a. Course Fees: 2,000/- service tax extra.
- b. **Eligibility**: ITI, Diploma, M.Sc in Electronics or Allied fields, B.E/B. Tech or Engg. Diploma in echanical/Production/Automobile/Industrial Engineering.
- c. Number of Seats : 20
- d. **Selection of candidates:** The selection of candidates is based on the qualification subject to eligibility and availability of seats.