

## **CERTIFIED CALIBRATION PROFFESSIONAL**

## Course Objectives:

- 1. To develop Calibration Professionals capable of handling calibration laboratories & managing calibration system in an organization
- 2. Understand Measurement Units, Standards, Systems, Testing & Calibration, Traceability & Uncertainty, Mathematics & and Applied Statistics
- **3.** Understanding standards ISO 9001 & 17025 requirements with regard to Laboratory Management for implementation & maintenance of accreditation.

Duration	5 working Days
Eligibility Criteria	ITI/Diploma/Bachelors/Masters degree in engineering/Science with min. one year work experience in calibration of equipment in the field of Electro-technical, Mechanical, Thermal & Optical.
Course contents	Course is designed in six modules – Module I – GENERAL METROLOGY (Global metrology scenario, Measurement units, Measurement standards & Measurement traceability) Module II – MEASUREMENT SYSTEM (Measurement methods, Measurement data & characteristics of measurements, T&ME specifications, Primary error sources, Measurement systems and capabilities & Measurement assurance programs) Module III – CALIBRATION SYSTEM (Calibration procedures & methods, Industry practices & regulations, Control of calibration environment, Calibration processes, Manual & automated calibration, Calibration results & reporting and Records & records management) Module IV - APPLIED MATHEMATICS & STATISTICS (Technical & Applied mathematics, QC tools and Applied statistics) Module V – UNCERTAINTY (Uncertainty management, Uncertainty components, Estimation of uncertainty, Evaluation of uncertainty & Reporting uncertainty) Module VI - QUALITY SYSTEMS & STANDARDS (Quality concepts, Management system ISO/IEC 17025 and NABL accreditation)
Course Material	The delegates will receive Specific designed Course notes, copy of ISO/IEC 17025:2005 standard & Stationery.
Methodology	Lectures, highly interactive sessions, group exercises and case studies.
Certification	The participants are awarded 'Certificate of Achievement' after successful in all six module tests scoring minimum 60% in each module with grading A:60-69%, A+:70-79%, A++: ≥ 80%.

## Participants & Nominations:

The course will have maximum of 15 participants on 'first come-first serve' basis.