

VICE DIRECTORATE OF PHYSICAL METROLOGY

Course: Calibrating Electrical Power Meters

Intended for:

This course is intended for technicians, technologists, professionals and others with general basic knowledge of electricity, preferably who work in energy measuring laboratories or who perform related tasks.

Identification:

Course name	Calibrating Electrical Power Meters	Course duration	Two (2) days
Minimum # of slots	Four (4) people	Maximum # of slots	Six (6) people
Place	The courses are taught in the Instituto Nacional de Metrología, located on Avenida Carrera (AK) 50 No. 26-55, Int 2 (CAN), Bogotá D.C.	Cost	
For information & registration: www.inm.gov.co link http://www.inm.gov.co/index.php/serviciosinm/capacitacion Tel. (571) 254 22 22 extensions 1417 & 1428			

Course Objectives:

Present the theoretical-practical fundamentals for calibrating electrical power meters, including the calculation of error and measurement uncertainty estimation.

Specific Objectives

- Within the International System of Units– SI, identify the units from which the magnitudes of power and energy are derived
- Identify the different existing types of energy meters
- Identify different methods of calibration for energy meters
- Identify the stages of the calibration process
- Perform a calibration practice and estimate its uncertainty by using its results
- Interpret the calibration results

Course Content:

Day One

1. Review the definitions and concepts that apply to the measurement of electrical power
2. Definition and classification of energy meters
3. Calibration methods of energy meters
4. Stages of the calibration process

Day Two

1. Calibration practice
2. Estimating uncertainty
3. Interpretation of electrical power meter calibration results
4. Requirements of calibration reporting or certification

Requirements

1. Completed the Basic Metrology Course
2. Basic knowledge of statistics, calculus, and using spreadsheets
3. The participant will preferably have access to a laptop computer or, in its absence, a scientific calculator

Important Information

In the event of partial attendance (missing more than 20% of the course) on the part of the participant, the INM will not award an "Attendance Certificate" or refund money from the course payment.

The courses are taught in the Instituto Nacional de Metrología located on Avenida Carrera (AK) 50 No. 26-55, Int 2 (CAN), Bogotá D.C. from 8:15 to 17:00 hours.

Users should consult about the availability of space before depositing payment: Tel. (571) 254 22 22 extensions 1417 & 1428.