



Ascendent Technology Sdn. Bhd.
(1093652-W)



Claimable



Claimable

Temperature Calibration



TEMPERATURE INSTRUMENT CALIBRATION-E009 (Competency Training)

PROGRAMME OVERVIEW:

This calibration training module is designed to meet ISO quality management system requirement include ISO 9001, ISO14001, IATF 16949, ISO 22000, ISO/IEC 17025, GMP, HACCP and other quality management systems. The calibration procedure is based on EURAMET-cg11. This module includes the evaluation of measurement uncertainty base on ISO Guide to the expression of uncertainty in measurement (GUM).

TARGET GROUP:

Quality Managers, Technical Managers, Laboratory Managers, Supervisors, Chemist, Engineer, Signatories of test reports & certificates, Laboratories Personnel.

OBJECTIVE:

At the end of the course, participants are expected to:

- 1) Able to perform calibration of temperature indicator, controller, recorder and temperature data logger base on simulation technique EURAMET-cg11
- 2) Understand differences between various principles of measuring temperature for example thermoelectricity and resistance thermometry
- 3) Understand various types of thermocouples for example types K, N, T, S, J, R and their applications
- 4) Understand resistance thermometer for example Pt100 and its input terminals
- 5) Perform calibration independently
- 6) Perform necessary calculations include uncertainty estimation based on ISO Guide [according to the model given only]
- 7) Able to generate ISO quality management system accepted calibration report

CONTENT:

- 1) Principle of metrology and ISO requirement on calibration.
- 2) Understand the equipment and its use
- 3) Measurement of temperature by Thermoelectricity and Resistance
 - ✓ Application laws of thermocouples
 - ✓ Measurement of thermal EMF
 - ✓ Types of thermocouples
 - ✓ Thermoresistive elements and resistance thermometers
 - ✓ Construction of Pt100 input (3 wire, 4 wire)
- 4) Care and Maintenance of the equipment
 - ✓ Temperature controller
 - ✓ Temperature indicator
 - ✓ Temperature recorder
- 5) Calibration, Calculation and Interpretation
 - ✓ Step by step procedure based on EURAMET cg-11.
 - ✓ Hands-on practice
 - ✓ Perform necessary metrological calculation.
 - ✓ Estimate uncertainty of test base on ISO Guide.
 - ✓ Draft calibration certificate and Interpretation
- 6) Work example

METHODOLOGY :

Lectures, discussion, demonstration, hands-on practice and practical exercises

CERTIFICATE :

Participants are required to complete a project usually at the end of training or within 2 weeks of completion of the training

- ✓ Certificate of competency - achieves score points above 70 %
- ✓ Certificate of attendance - score points below 70 % or no submission of assessment

REGISTRATION FORM (E009):

PUBLIC TRAINING

Course Fee : RM 2,100 Per Pax
Training Date : Refer to Training Calendar
Venue : **Ascendent Training Room**
Duration : 2 Days
Time : 9:00 AM - 5:00 PM
Venue : Ascendent Technology Sdn Bhd
HRDF : **SBL - Khas**

Participant : Mr / Ms
 Designation :
 NRIC :
 Mobile No. :
 Email :

IN-HOUSE TRAINING

Course Fee : RM 6,000 Per Day
Duration : 2 Days
Time : 9:00 AM - 5:00 PM
HRDF : **SBL - Khas**
Maximum No. : 5 - 25 Candidates

Participant : Mr / Ms.....
 Designation :
 NRIC :
 Mobile No. :
 Email :

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CANCELLATION / POSTPONEMENT POLICY

1. Ascendent Technology Sdn.Bhd. reserves the right to cancel, postpone or make any changes to the venue and training dates due to unavoidable circumstances.
2. Reservation can be made by telephone or email, but will only be confirmed upon the received of completed registration form and payment.
3. Please do not make any travel arrangements until you have received written confirmation for your registration from us.
4. No cancellation is allowed but a candidate replacement can be arranged.
5. For confirm cancellation: 7 days notice prior to commencement will subjected to RM250 service charge. If less than 7 days notice, there will be no refund.
6. Confirm postponement for in-house training less than 14 days notice prior to commencement will subjected to 50% service charge on total invoice.

PAYMENT DETAILS

All cheques should be crossed and made payable to: **ASCENDENT TECHNOLOGY SDN BHD** Bank A/C No. **Maybank** 5127-6360-6820.

Admittance will be permitted upon receipt of full payment 2 weeks before the course is conducted.

Training certificate will be awarded upon received of full payment

FOR HR DEPARTMENT

Company Name:	Contact Person: Mr / Ms:	
Address:	Designation:	
	Department:	
	Email:	
	Mobile No:	
	Signature:	Company Stamp:
Training Date:		
Telephone:		
Type of Industry:		