



PROCESS CONTROL : MEASUREMENT AND CALIBRATION

1 November 17-18, 2025 (Monday-Tuesday) 8.45 am – 5.00 pm FMM Institute, Perak

This course will help those who are using or calibrating measurement instruments, calibration coordinators, or for those responsible for maintaining quality, especially by persons responsible for the contracting of calibration services. A good measurement system is important to conform to any quality management systems. This course is intended to cover commonly used calibration terminology and practices in the industry.

COURSE CONTENTS

INTRODUCTION TO SCIENCE OF MEASUREMENTS

- What is measurement and calibration?
- Measurements in our lives and workplace.
- The importance of good measurement.

DEVELOPMENT & ISSUES IN MEASUREMENT AND CALIBRATION

- The rise of the need of better measurements.
- Differences between resolution, accuracy, precision.
- What is measurement uncertainty?
- Type A and Type B Uncertainty

STANDARDS & STANDARDIZATION

- Differences in standard in lab against international standard.
- The concept of traceability and respective requirements

MANAGING MEASUREMENT AND CALIBRATION SYSTEM

- Part of Measurement and Calibration System
- Calibration interval and determination
- Calibration record keeping
- Calibration procedures
- Personnel Training

MAKING GOOD MEASUREMENTS

- Measuring Instruments
- Measuring Process
- Measurement Assurance

UNIT AND MEASURING INSTRUMENTS

- Basic SI units
- Derivatives Units

TRAINER

CIK NADHRA BINTI HALIG has served at multiple multinational manufacturing companies and specializes in the Testing & Calibration, and general quality related to a manufacturing environment since 2004. She has a degree in Mechanical Engineering from University of Minnesota, USA and MSc (Management of Industry and Technology) from Universiti Kebangsaan Malaysia and currently pursuing part time MBA. She is a trained and appointed as Internal Auditor for ISO 9001, ISO 14001, and ISO 17025 and has experience in performing audits for her previous employer suppliers in compliant to the Green Procurement requirement. She managed the quality and technical aspect of internal central calibration and testing laboratories which serves both internal and external customers. Her experience working with customers in electrical and electronic industry, automotive industry and general consumer goods has exposed her to different requirement of different industry. She did not only perform calibration and testing services for her customer, but also provide consultation on their testing requirements, sample preparation, testing methods and reporting.

CIK NADHRA is a Certified Trainer under PSMB and previously was an instructor under the Measurement Faculty for Operator Development Program at her previous company. She also taught Measurement Control Certification program for Panasonic Human Resources Development Center which is the certification center for metrology personnel under the Panasonic Group of Companies. She has also conducted various on the job training and in house workshops for topics related to calibrations and testing in public and private organizations in the ASEAN countries.

WHO SHOULD ATTEND

Production/Quality/QA/QC Executive/ Engineers/ Technicians

TRAINING METHODOLOGY

- Lecture with slides
- Group activities and presentation

OBJECTIVES

- Create awareness of metrology, science of measurement
- Relate metrology with work and daily lives at individual level
- Provide insight of how to improve work environment
- Help to provide understanding terminologies used in commercial calibration services

LEARNING OUTCOMES

- Describe what is metrology, which science of measurement
- Explain the importance of measurement in our lives and international trade
- Understand the factors that affect measurements
- Understand the commonly used terminologies in measurements and calibration

COURSE DETAILS

Date **November 17-18, 2025 (Monday-Tuesday)**
Time **8.45am - 5.00pm**
Venue **FMM Institute Perak, No 1, Lorong Raja DiHilir, 30350 Ipoh, Perak**
Medium of Instruction **English**
CPD **14 hours**
Fees ☐ **Members RM1,134.00/pax** ☐ **Non-Members RM1,296.00/pax**
(Fees inclusive of Service Tax at 8%, Course Materials, Refreshment, Lunch and Certificate of Attendance)

ADMINISTRATIVE DETAILS

HRD CORP CLAIMABLE COURSE DETAILS

- Training Provider: **FMM Institute Perak** ■ MyCoID : **475427W_PERAK**
- HRD Corp Programme No: **Provided upon confirmation**

DISCLAIMER

The FMM Institute reserves the right to change the facilitator, date and to vary / cancel the course should unavoidable circumstances arise. All efforts will be taken to inform participants of the changes.

REGISTRATION

- Upon **Faxing/Mailing** the completed **Registration Form** to FMM Institute, you are **deemed** to have read and **accepted** the terms and conditions. The **course** would also be **deemed** as **confirmed** unless informed otherwise.
- Will be based on First-Come-First served basis.

PAYMENT

- **Cheques** made in favour of "FMM Institute" should be forwarded to FMM Institute Perak.
- For **HRD Corp Claimable Course**, an **Attendance of 100% is a must**, in any case, **employers will be billed in full**.
- FMM Institute SST Registration No. **W10-1901-32000105**
- FMM Institute TIN No. **C10626805080**

CANCELLATION

- Must be in Writing with Reasons
- 7 days before the course – No payment charged
- 3 – 6 days before the course - 50% payment charged
- < 3 days before the course – Full payment charged
- Participants who did not turn-up will be charged full payment
- Replacements can be accepted at no additional cost

Closing Date:
NOVEMBER 10. 2025

~ Registration Form ~

PROCESS CONTROL : MEASUREMENT AND CALIBRATION

FMM Institute

No 1, Lorong Raja DiHilir, 30350 Ipoh, Perak

Fax: 05-5488221

Dear Sir / Madam, please register the following participant(s) for the above programme.

1.	Name		Designation	
			HP No	
	NRIC		Email	
2.	Name		Designation	
			HP No	
	NRIC		Email	
3.	Name		Designation	
			HP No	
	NRIC		Email	

(Please attach a separate list if space is insufficient)

We hereby confirmed that (Please tick (✓) in appropriate box):-

- ☐ We **will be claiming from HRD Corp** and full payment would made to FMM Institute in the event that no disbursement from HRD Corp under any circumstances
- ☐ We will **NOT BE CLAIMING from HRD Corp**. Enclosed cheque/bank draft No _____ for RM _____ being payment for _____ participant(s) made in favour of the "FMM Institute".

Submitted by:

Name:	Designation:		
Company:	Tel:	Fax:	
Address:			
Email:	FMM Membership No		