



MEASUREMENT & CALIBRATION TRAINING 2021

Over more than 20 years, **OBSNAP GROUP** has served the local and overseas scientific & technical sector, since 1997. This includes our wide variety of Metrology, Material Testing, Analysis & Detection Instruments and Equipment. We are ISO/IEC 17025 Accredited Calibration Laboratory and provide training for those interested to do their own in-house calibration.

WHY US?

- A team of trainer with 25 years' experience in various disciplines
- Training focus on the principles and practical aspects of measurement and quality measurement system
- Provide Hands-on practice
- Training can be tailored to your location & your specific requirement
- Trainer appointed as Approved Technical Signatories by Department of Standards Malaysia (DSM)

OBSNAP TRAINING BENEFITS

- Gain understanding on the importance of measurement and calibration system
- Gain understanding on factors that contribute to measurement uncertainty
- Enhance knowledge on related calibration procedures and standards
- Improve skills that can be applied in workplace
- Learn how to successfully manage an effective calibration system

OUR CREDENTIALS



For further enquiries, please contact :

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COURSE OUTLINE

Measurement and Calibration System (1 Day)			
Code	Course Title	Outline	Price
1	Measurement and Calibration System	History of measurement Introduction to measurement and metrology International vocabulary of basic and general terms in metrology Importance of calibration Traceability and calibration measurement procedures Introduction to measurement uncertainty	RM1000
Understanding Calibration (1 Day)			
Code	Course Title	Outline	Price
2	Understanding Calibration	What is calibration? Important of calibration Measurement Traceability Calibration Interval	RM1000
Measurement Uncertainty (1 Day)			
Code	Course Title	Outline	Price
3	Measurement Uncertainty	Introduction to measurement uncertainty Mathematical concepts of measurement uncertainty and evaluating the standard uncertainty Relationship between instrument tolerance, specification, error and measurement uncertainty Examples of fundamental calculation of measurement uncertainty	RM1000
Understanding Calibration Certificate (Half Day)			
Code	Course Title	Outline	Price
4	Understanding Calibration Certificate	Different calibration, verification, validation and manufacturer certificate Understanding accuracy, specification and maximum permissible error How to use calibration data (results, correction and error) Define calibration interval	RM300
Understanding Calibration Process (1 Day)			
Code	Course Title	Outline	Price
5	Calibration of Weighing Balance	ISO Guide and ISO/IEC 17025:2017 requirement Understand International System (SI) & Metrology System Traceability concept, requirement and importance Laboratory environment monitoring & control Calibration personnel education requirement, skills and responsibility Calibration as per international procedure & validation method Measurement Uncertainty and source Practical calibration process	RM1500
6	Calibration of Caliper		
7	Calibration of Pressure Gauge		
8	Calibration of Liquid in Glass Thermometer		
9	Calibration of Temperature Sensor		
10	Calibration of Heat Enclosure		
Understanding Calibration Process and Uncertainty (2 Day)			
Code	Course Title	Outline	Price
11	Calibration of Weighing Balance	ISO Guide and ISO/IEC 17025:2017 requirement Understand International System (SI) & Metrology System Traceability concept, requirement and importance Laboratory environment monitoring & control Calibration personnel education requirement, skills and responsibility Calibration as per international procedure & validation method Measurement Uncertainty and source Practical calibration process Measurement uncertainty budget and calculation Competency Test	RM2500
12	Calibration of Caliper		
13	Calibration of Pressure Gauge		
14	Calibration of Liquid in Glass Thermometer		
15	Calibration of Temperature Sensor		
16	Calibration of Heat Enclosure		

TRAINING SCHEDULE

Code	Course Title	Type	Location	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
1	Measurement and Calibration System	Theory	Public/In-House	5				4				7			
2	Understanding Calibration	Theory	Public/In-House		9				8				5		
3	Measurement Uncertainty	Theory	Public/In-House			2				6				2	
4	Understanding Calibration Certificate	Theory	Public/In-House				6				3				7
5	Calibration of Weighing Balance	Theory / Hands-on	Public/In-House	19						27					
6	Calibration of Caliper	Theory / Hands-on	Public/In-House		22						17				
7	Calibration of Pressure Gauge	Theory / Hands-on	Public/In-House			16						21			
8	Calibration of Liquid in Glass Thermometer	Theory / Hands-on	Public/In-House				20						20		
9	Calibration of Temperature Sensor	Theory / Hands-on	Public/In-House					18						16	
10	Calibration of Heat Enclosure	Theory / Hands-on	Public/In-House						22						21
11	Calibration of Weighing Balance	Theory / Hands-on	Public/In-House	19,20						27,28					
12	Calibration of Caliper	Theory / Hands-on	Public/In-House		22,23						17,18				
13	Calibration of Pressure Gauge	Theory / Hands-on	Public/In-House			16,17						21,22			
14	Calibration of Liquid in Glass Thermometer	Theory / Hands-on	Public/In-House				20,21						20,21		
15	Calibration of Temperature Sensor	Theory / Hands-on	Public/In-House					18,19						16,17	
16	Calibration of Heat Enclosure	Theory / Hands-on	Public/In-House						22,23						21,22

Also provide theory/hands-on training for measuring equipment :

- Dimensional (Coating Thickness Gauge, Ultrasonic Thickness Gauge, Dial/Digital Thickness Gauge, etc)
- Force (Force Measuring Device, Universal Testing Machine)
- Temperature (Temperature Measuring Device, Thermohygrometer)
- Pressure (Pressure Transmitter, Pressure Transducer, Pressure Safety Valve, etc)
- Mass (Standard Weight, etc)
- Time & Frequency (Tachometer, etc)