

MASS METROLOGY

Aim of course

An introduction to mass metrology, which is the science of measurement of mass utilising various techniques. This course introduces the various mass measuring principles and instruments used in the industry, as well as their calibration against traceable standards.

Attendees must have their own pocket calculator (which must contain trigonometric functions) and must be able to use it.

Pre-Requisites for attending this course

- Measurement System (Part 1 & 2)
- Uncertainty of Measurement – Physical Measurements

Course content

Introduction to Mass Metrology

Technical Fundamentals of Mass

Principles of Mechanical Balances

Electro - Mechanical Balances

Digital Electronic Balances

Calibration of Weighing Instruments (other than balances)

Quality systems

Density of air and weights

Calibration of Balances: (preparation of weights, balances and the environment)

(electro-mechanical balances)

(digital / electronic balances)

Uncertainties

Calibration of Mass pieces: (preparation of weights, balances and the environment)

Uncertainties

Practicals

Who should attend

Calibration technicians, metrologists and physical testing laboratory personnel. The course can also be useful for analytical testing personnel who have the need to make mass measurements.

Course Duration

5 Days

Evaluation

Daily tests and the passing of a final examination are required in order to successfully complete this course

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