

# Mass Metrology for High Accuracy: OIML Class F to E

## Course Objectives

The course provides fundamentals of mass measurements, looking at what affects reliability and accuracy of mass measurements, and how to ensure traceability in weighing. It also covers the evaluation of different weighing techniques used to calibrate mass pieces, the requirements for and calibration of weighing instruments and how to evaluate measurement uncertainty in weighing.

## Course Content

The course covers the following:

- Technical and Metrological requirements for mass standards and weighing instruments
- Calibration of mass standards
- Determination of air density and air buoyancy correction
- Calibration of weighing instruments
- Uncertainty of measurements for mass standards and weighing instruments
- Reporting of results and interpretation of calibration certificates in mass metrology

## Course Date

3 – 7 June 2024

## Duration

5 days

## Cost

R10 500

## Who should attend?

Calibration metrologists in mass metrology, scientists, quality engineers, testing laboratory personnel, analytical chemists/ technicians and everyone who needs to perform mass measurements accurately.

## Course Information

The course is presented by professional scientists with years of technical experience in mass, volume, and density metrology. Over a 5 days duration, theoretical background is presented, practical measurements, and calculations are performed. After a written examination, a certificate of successful completion is issued for passing the exam. A certificate of attendance is issued for attending and not passing the exam.

