

EURAMET Basic training course on dimensional measurements

20 – 22 June 2023

University of Maribor, Faculty of Mechanical Engineering
(MIRS/UM-FS/LTM)

Smetanova ul. 17, SI-2000 Maribor, Slovenia

Agenda version 2023-04-06

Tuesday, 20 June 2023

- 9:00 Registration, refreshment
- 9:30 Introduction
- 9:50 General principles of length metrology

- 10:30 Break

- 10:45 Calibration and traceability – definitions and examples

- 12:15 Lunch

- 13:00 Measurement errors and measurement uncertainty – theory in short
- 14:00 Measurement uncertainty – practical evaluation with examples

- 15:00 Break

- 15:15 Practical examples of assuring traceability of reference standards in LTM
- 16:30 Discussion
- 17:00 End of day 1

Wednesday, 21 June 2023

- 9:00 Lab tour, creation of 2 groups for practical work
- 9:30 Practical demonstration of calibrations
 - Group 1: external diameters (plugs and spheres)
 - Group 2: calibration of 1D measuring machines

- 10:30 Break

- 10:45 Practical work in groups - continued

- 12:15 Lunch

- 13:00 Practical demonstration of calibrations
 - Group 1: internal diameters (rings)
 - Group 2: line scales and tapes

- 15:00 Break

- 15:45 Practical work in groups - continued
- 16:30 Discussion
- 17:00 End of day 2

Thursday, 22 June 2023

- 9:00 Practical demonstration of calibrations
Group 1: calibration of 1D measuring machines
Group 2: external diameters (plugs and spheres)
- 10:30 Break
- 10:45 Practical work in groups - continued
- 12:15 Lunch
- 13:00 Practical demonstration of calibrations
Group 1: line scales and tapes
Group 2: internal diameters (rings)
- 15:00 Break
- 15:45 Practical work in groups - continued
- 16:30 Discussion
- 17:00 End of day 2

Lecturers:

- Bojan Ačko, MIRS/UM-FS/LTM
- Rok Klobučar, MIRS/UM-FS/LTM
- Mitja Mlakar, MIRS/UM-FS/LTM

Coffee breaks and lunches will be provided by the host.

There is a certain flexibility in distribution of session's' timeframes - this can be adjusted on the spot.