

**EURAMET Training Course on Electrical Power, Energy and Power Quality  
Measurement and Calculation of Measurement Uncertainty**

11 - 15 March 2019 / 18 - 22 March 2019 (repetition)

TÜBİTAK-UME, Gebze, Turkey

Agenda version 2019-02-18

**Monday, 11 or 18 March 2019 - Day 1**

- 08:45            **Registration**
- 09:00            **Welcome and Opening**  
Introductory Round  
Objectives of the Training Course and Workshop
- 09:30 – 17:00   **AC Power & Energy Measurements in General Energy Meter  
Measurements**

**Tuesday, 12 / 19 March 2019 - Day 2**

- 09:00 – 17:00   **Precision Active, Reactive and Apparent Power  
Measurements  
Uncertainty calculations**

**Wednesday, 13 / 20 March 2019 - Day 3**

- 09:00 – 17:00   **Laboratory Work:**
- Practices on AC Power & Energy Measurements
  - Using Digital Sampling Method for AC Power Measurements
  - Prediction, Definition, Calculation and Compensation of Errors
  - Calibration of Energy Meters & Energy Standards
  - Need for Isolation Current Transformers in Three-Phase Energy Meter Measurements

**Thursday, 14 / 21 March 2019 - Day 4**

- 09:00 – 17:00   **Power Quality Measurements; Harmonics and Flicker  
Uncertainty Calculations**

## Friday, 15 / 22 March 2019 - Day 5

09:00 – 17:00	<b>Laboratory Work:</b> <ul style="list-style-type: none"><li>– Practices of Power Quality Measurements</li><li>– Harmonic Current and Voltage Measurements (PQ Analysers, PQ Sources)</li><li>– Flicker Measurements (Flicker Meters)</li><li>– Data Analysis</li><li>– Measurement Uncertainty</li></ul>
17:00	<b>Closure of the Training Course</b>

Lunches and coffee breaks will be announced in the sessions

### Lecturers

- Hüseyin Çaycı, TÜBİTAK-UME
- Tansu Kefeli, TÜBİTAK-UME
- Özlem Yılmaz, TÜBİTAK-UME
- Stanislav Maslan, CMI (Invited Lecturer)