

Syllabus of Measurement course

(1 lecture = 3 hours)

Lectures

1. Law of propagation of error and uncertainty (4 lectures)
2. Frequency counters with direct and reciprocal methods and their uncertainty analysis (1 lecture)
3. Period measurement (between pulses, pulse duration, pulse period) and their uncertainty analysis (2 lectures)
4. Oscillators (Leeson model, Significant Q, Frequency stability) (1 lecture)
5. Dual ramp voltmeter, 4 wires resistance measurement and resistance bridge (2 lectures)

Laboratory

1. Wheatstone bridge and two voltage divider for uncertainty (1 lecture)

Total 10 lectures = 30 hours