

Name of the subject: Measurements Laboratory I		NEPTUN-code: KMAMT12AND	Contact hours/week: 0 lectures + 0 practice + 2 lab. practice
Credits: 2 Requirement: examination		Prerequisite: Measurements I. KMAMT11AND paralele	
Lecturer: Lecturers of the Institute of Instrumentation and Automation	Beosztás: associate professor	Kar és intézet neve: Kandó Kálmán Faculty of Electricity Institute of Instrumentation and Automation	

Subject		
Aim of the course: To attain the measuring principles, necessary for measuring basic electrical quantities. Knowledge of construction and handling of most important electrical measuring instruments, interpretation of their technical specification. Knowledge, necessary to select optimal measuring methods and instruments.		
Thematics:	Week	Cont. hours
Basics of the measurements	1.	2
Measuring current and voltage I.	2.	2
Measuring current and voltage II.	3.	2
Measuring current and voltage III.	4.	2
Oscilloscope and generator usage I.	5.	2
Oscilloscope and generator usage II.	6.	2
Oscilloscope and generator usage III.	7.	2
Replacement 1.	8.	2
Measuring AC voltage and current I.	9.	2
Measuring AC voltage and current II.	10.	2
Examination of test setup	11.	2
Evaluation of Measurements Results (series of measurements, characteristics)	12.	2
Replacement 1.	13.	2
Independent measurement	14.	2

Visit of the laboratory practice is obligatory.

Students should write a test every weeks.

There are two type of test:

- „starter test”: 2 questions from new measurements starter question lists
- „test for mark”: 5 questions from the previously measured themas

At the end of the semester students should make an independent measurement.

The complete semester mark is the mathematical average of independent measurement mark and the „test for mark” marks.

Literature:	
Compulsory: Dr. Horváth Elek:	Méréstechnika jegyzet (ÓE-KVK-1161)
Optional: Kiss Ernő: Schnell: Helfrick-Cooper: Chin:	Elektronikus műszerek Jelek és rendszerek mérés technikája Modern Electronic Instrumentation and Measurement Techniques Elektronic Instruments and Measurements