GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Metrology II, PG_00056027		
Field of study	Electrical Engineering		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Metrology and Information Systems -> Faculty of Electrical and Control Engineering	
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marek Wołoszyk
	Teachers	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	30.0	0.0	0.0	30

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	30	2.0	18.0	50

Subject objectives

Introduce students with the methods and tools for measuring electrical and nonelectical quantities

Learning outcomes

Course outcome	Subject outcome	Method of verification
K6_K02		
K6_U02		
K6_W05		

Subject contents

LABORATORY Analysis of measurement data. Calibration. Measurement of RLC parameters. Oscilloscope measurement. Power measurement of three phase circuits. Measurement of sinusoidal and distorted waveforms. Computer processing of measurement signals. Electrical temperature measurements. Examination of selected displacement sensors.

Prerequisites and co-requisites

Basic knowledge of electrical engineering and electrical circuit analysis. Knowledge of the Metrology I course.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Practical exercise	60.0%	100.0%

Recommended reading

Basic literature	1. Praca zbiorowa (red. Swędrowski L.): METROLOGIA. Skrypt do laboratorium. Wydawnictwo Politechniki Gdańskiej, 2009.
Supplementary literature	1. Chwaleba A., Poniński M., Siedlecki A.: Metrologia elektryczna. WNT, 2010. 2. Tumański S.: Technika pomiarowa. WNT, 2016. 3. Lisowski M.: Podstawy metrologii. Oficyna Wydawnicza Politechniki Wrocławskiej, 2011.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

1. Explain the concepts of median and modal values.

2. Measurement error of insensitivity in a Wheatstone bridge.

3. The methods and sensors used for the teperature measurements.

Work placement

Not applicable