

Title Electrical Measurements of Nonelectrical Quantities	Code 10103222110103201097
Field Electrical Engineering	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 3
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Electrotechnics.

Assumptions and objectives of the course:

The student should obtain the knowledge of the methodology and means of problems solution in the scope of measurements of nonelectrical quantities.

Contents of the course (course description):

Definitions of sensors and converters. Standards and recommendations. Structure of measuring path. Fundamentals of resistance tensometry. Power supply of electrical bridges and processing of their output signals. Fundamentals of measurements of the selected quantities: force and force moments, mechanical power, oscillations, acceleration, flow, temperature, thermal power and energy. Acoustic measurements. Humidity measurements. Examples of measurements and evaluation of their results. An example of the set for climatic investigations of sensors and converters.

Introductory courses and the required pre-knowledge:

Fundamentals of mathematics, physics, metrology, electrical and electronic engineering.

Courses form and teaching methods:

Lectures, laboratory exercises.

Form and terms of complete the course - requirements and assessment methods:

Test after the course lectures and reports on laboratory exercises.

Basic Bibliography:

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Additional Bibliography:

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