

Title Lighting equipment	Code 10103222310103201140
Field Electrical Engineering	Year / Semester 2 / 3
Specialty Lighting Engineering	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: 1	Number of credits 5
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course of the study program in Electrical Engineering Faculty for full time graduate studies, specjalty ? Lighting Engineering.

Assumptions and objectives of the course:

The student should obtain advanced knowledge of light generation at lamps, structures, operates and design of incandescent filament lamps, discharge lamps and LED, structure, characteristics, theoretical fundamentals and calculation of luminaries.

Contents of the course (course description):

Parameters and characteristics of lamps. Basic principles of light generation. Incandescent filament lamps (vacuum, gas-filled, tungsten halogen) ? structures, parameters and characteristics. Fluorescent lamps ? basic principles, structures, characteristics, feed systems. High intensity discharge lamps (high pressure mercury, sodium, metal halide lamps) ? basic principles, structures, characteristics, feed systems. LED - basic principles, structures, characteristics. Systematic of luminaires. Light management systems.

Introductory courses and the required pre-knowledge:

Basic knowledge of lighting equipment.

Courses form and teaching methods:

Lectures, exercises and practical training in laboratory.

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

Oral and written examination, laboratory reports.

Basic Bibliography:

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Additional Bibliography:

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