

Title Lighting equipment	Code 1010324291010320415
Field Electrical engineering	Year / Semester 5 / 9
Specialty Lighting engineering	Course elective
Hours Lectures: 8 Classes: - Laboratory: 8 Projects / seminars: -	Number of credits 0
	Language polish

Lecturer:

DSc Krzysztof Wandachowicz
Institute of Electrical Engineering and Electronics
60-965 Poznań, ul. Piotrowo 3a
tel.+48 061 665 25 85
e-mail: Krzysztof.Wandachowicz@put.poznan.pl

Faculty:

Faculty of Electrical Engineering
ul. Piotrowo 3A
60-965 Poznań
tel. (061) 665-2539, fax. (061) 665-2548
e-mail: office_deef@put.poznan.pl

Status of the course in the study program:

Obligatory course of the study program in Electrical Engineering Faculty for extramural undergraduate studies, specialty - Lighting Engineering.

Assumptions and objectives of the course:

The student should obtain basic knowledge of light generation at lamps, structures and operates of incandescent filament lamps, low- and high-discharge lamps, light emitting diodes, structure and characteristics of luminaries.

Contents of the course (course description):

Parameters and characteristics of lamps. Incandescent filament lamps (vacuum, gas-filled, tungsten halogen) ? structures, parameters and characteristics. Fluorescent lamps ? basic principles, structures, characteristics, lamp circuits. High intensity discharge lamps (high pressure mercury, sodium, metal halide lamps) ? basic principles, structures, characteristics, lamp circuits. Lighting emitting diodes - basic principles, structures, characteristics. Systematic of luminaires. Light management systems.

Introductory courses and the required pre-knowledge:

Basic knowledge of physics, electrical engineering and lighting engineering.

Courses form and teaching methods:

Lectures, exercises and practical training in laboratory.

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

Test, reports from laboratories.

Basic Bibliography:

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Additional Bibliography:

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