Title	Code
Lighting equipment	**10103212710103201256**
Field: **Electrical Engineering**	Year / Semester: **4 / 7**
Specialty: **Lighting Engineering**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **1** Projects / seminars: **1**	Number of credits: **4**
	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 undergraduate studies, specialty ? Lighting Engineering

Assumptions and objectives of the course:

The student should obtain basic knowledge of light generation at lamps, structures, operates and design of incandescent filament lamps and discharge lamps, structure, characteristics, theoretical fundamentals of luminaires.

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, 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 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:

Oral and written examination, laboratory reports.

Basic Bibliography:

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Additional Bibliography:

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