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Assessment methods of study ou

Oral and written examination, laboratory reports.

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.

Basic bibliography:

1. Technika Świetlna. Poradnik. PWT, Warszawa 1960.

2. Bąk J., Pabiańczyk W.: Podstawy techniki świetlnej. Wyd. Pol. Łódzkiej, Łódź 1994

3. Żagan W.: Podstawy techniki świetlnej. Ofic. Wyd. Pol. Warszawskiej, Warszawa 2005

4. Wiśniewski A.: Elektryczne źródła światła. Oficyna Wydawnicza Politechniki Warszawskiej. Wydanie I (2010)

5. Philips, Lighting Manual. Wyd.V 1993 r.

Additional bibliography:

1. Technika Świetlna ?09. Poradnik ? Informator. Wyd. PKOś, Warszawa 2009

2. Lighting Handbook, Reference &Application. IES of Nofth America, New York 2010

Result of average student's workload

Activity	Time (working hours)	
1. Participation in lectures		15
2. Participation in laboratories	15	
3. Participation in project activities		15
4. Participation in consultations	20	
5. Preparation for laboratory and project exercises and develop rep	30	
6. Exam preparation		30
Student's wo	orkload	
Source of workload	hours	ECTS
Total workload	125	5
Contact hours	65	3
Practical activities	60	3