Designing of electrical installations - course description

General information

Course name	Designing of electrical installations
Course ID	06.2--ELEKTP-PIE-Er
Faculty	Faculty of Computer Science, Electrical Engineering and Automatics
Field of study	Electrical Engineering
Education profile	academic
Level of studies	First-cycle Erasmus programme
Beginning semester	winter term 2022/2023

Course information

Semester	6
ECTS credits to win	3
Course type	obligatory
Teaching language	english
Author of syllabus	• dr inż. Piotr Leżyński

Classes forms

The class form	Hours per semester (full-time)	Hours per week (full-time)	Hours per semester (part-time)	Hours per week (part-time)	Form of assignment
Laboratory	15	1	-	-	Credit with grade
Lecture	15	1	-	-	Credit with grade

Aim of the course

The course will give the students the knowledge about testing and designing of the electrical installation.

Students will find out the methodology of designing electrical installations using the programming tools.

Prerequisites

Fundamentals of electrical engineering, Circuit theory

Scope

Safety rules in work with electrical devices and installations

Types and topologies of electrical installations

Basic installation devices

Protection against electric shock

Wires calculation and selection of electrical installations

Protection of electrical installations

Documentation of electrical installations

Measurements and fault location in electrical installations

Regulation and standardization concerning to electrical installations

Qualifications required for the design, construction, and operation of electrical installations

Teaching methods

Lecture: conventional lecture , problem lecture, discussion.
Laboratory: laboratory exercises.

Learning outcomes and methods of theirs verification

Outcome description	Outcome symbols	Methods of verification	The class form
The student can identify functional requirements and prepare design documentation for electrical installations.		• an observation and evaluation of the student's practical skills • carrying out laboratory reports	• Laboratory
The student can identify legal and standardization requirements for a specific project of installation.		• an exam - oral, descriptive, test and other • carrying out laboratory reports	• Lecture • Laboratory

Outcome description	Outcome symbols	Methods of verification	The class form
The student has general knowledge related to designing and testing of electrical installations.		• an exam - oral, descriptive, test and other	• Lecture

Assignment conditions

Lecture – obtaining a positive grade in written or oral exam.
Laboratory – the passing condition is to obtain positive marks from all laboratory exercises to be planned during the semester

Calculation of the final grade: lecture 60% + laboratory 40%

Recommended reading

Electrical installation guide According to IEC International Standards, Schneider Electric 2008 ISBN: 978.2.9531643.0.5

Further reading

Notes

Modified by dr hab. inż. Paweł Szcześniak, prof. UZ (last modification: 06-04-2022 22:42)