DESCRIPTION OF THE COURSES

- Course code: ELR2467
- Course title**: Exploitation of electrical equipment**
- Language of the lecturer: polish

Course form	***Lecture***	***Classes***	***Laboratory***	***Project***	***Seminar***
*Number of hours/week**	*1*				*1*
*Number of hours/semester**	*11*				*11*
Form of the course completion	*class test*				*completion*
ECTS credits	*1*				*1*
Total Student's Workload	*30*				*30*

- Level of the course (basic/advanced): advanced
- Prerequisites: Credited Electrical Equipment
- Name, first name and degree of the lecturer/supervisor: Zbigniew Wróblewski, PhD, DSc
- Names, first names and degrees of the team's members:
  Grażyna Dąbrowska-Kauf, PhD,
  Robert Kudła, PhD
- Year: 2 Semester: 4
- Type of the course (obligatory/optional): optional
- Aims of the course (effects of the course): Recognize regulation of exploitation of electrical power equipment.
- Form of the teaching (traditional/e-learning): traditional
- Course description:

Division of electrical power equipment according to exploitation theory. Systems of usage and handling of electrical power equipment. Identification of consumption processes of electrical power equipment. Revisions, extemporary and preventive scheduled overhauls. Organization of works at electrical power equipment in industry. Regulation of exploitation of electrical power equipment. Exploitation instructions. Processes of renovation and administrating renewal parts in electricity industry. Organization of gaining and processing information about exploitation. Integrated computer systems of management of exploitation information.

- Lecture:

Particular lectures contents	*Number of hours*
1. Introduction, classification of electrical power equipment. Description of systems of usage, handling and exploitation of electrical power equipment	*2*
2. Processes of usage and handling of electrical power equipment and their quantity measures. Intensity of usage and handling. Exploitation resources.	*2*
3. Handling of electrical power equipment, on-going revision, scheduled overhauls. Organization of overhauls' base. Overhauls optimisation criterions.	*2*

4. Exploitation of electrical lines, stations and another electrical power equipments.	*2*
5. Rules of elaboration of exploitation instruction..	*2*
6. Administrating of renewal parts of electrical power equipment	*1*

- Classes – the contents:
- Seminars – the contents:

The topics of seminar are an extension and a supplement to the topics of lectures. Seminar objective for the students is to: practically master the rules of planning, building and organising exploitation systems in power engineering sector, create databases for the needs of exploitation, integrate data processing systems, optimise exploitation systems of electrical power equipment and gain the ability to analyse and evaluate sample exploitation systems in electrical industry.

- Laboratory – the contents:
- Project – the contents:
- Basic literature:

[1] Jaźwiński J., Ważyńska-Fiok K.: Bezpieczeństwo systemów. PWN, Warszawa 1993.
[2] Konieczny J.: Inżynieria systemów działania. WNT, Warszawa 1983.
[3] Praca zbiorowa: Materiały VIII Krajowego Kongresu Eksploatacji Urządzeń Technicznych.KBM PAN, Krynica 1

- Additional literature:

[1] Konieczny J.: Sterowanie eksploatacją urządzeń. PWN, Warszawa 1975.
[2] Praca zbiorowa: Czasopismo „Zagadnienia Eksploatacji Maszyn". PWN, Warszawa 2000-2006

- Conditions of the course acceptance/credition:

Completion of the course is confirmed on the basis of class test covering the whole material

***** - depending on a system of studies