COURSE DESCRIPTION CARD

Faculty of Electrical Engineering									
Field of study	**Electrical Engineering**							**Degree level and programme type**	**Bachelor's degree**
Specialization/ diploma path	**-**							**Study profile**	**-**
Course name	**Project of Electrical Installations in Industrial Building**							**Course code**	**IS-FEE-10044W**
								Course type	**elective**
Forms and number of hours of tuition	**L**	**C**	**LC**	**P**	**SW**	**FW**	**S**	**Semester**	**winter**
				30				**No. of ECTS credits**	**6**
Entry requirements	**-**								
Course objectives	**Teaching how to solve an engineering project task by means of the information obtained from literature, databases and other sources.**								
Course content	**Complete with module content: Rules and statutory regulations, Installed power loads – Characteristics, LV architecture selection guide, Lighting installations, Sizing and protection of conductors, Protection against electric shocks, LV switchgear: functions & selection, Overvoltage protection, Reactive energy**								
Teaching methods	**discussion, presentation**								
Assessment method	**projects completion, presentation and discussion of the projects**								

Symbol of learning outcome	**Learning outcomes**	**Reference to the learning outcomes for the field of study**
LO1	**can elaborate and realize the schedule of actions necessary to achieve the goal**	
LO2	**identyfies and describes basic technical solutions in the area of the project**	
LO3	**can calculate basic quantities describing operating simple systems connected with the area of the project**	
LO4	**is able to obtain information from the literature, databases, and other sources for the project;**	
LO5	**can design circuits and systems in chosen field of electrical engineering**	
LO6	**is able to use the data sheets and application notes to**	
LO7	**is able to prepare and present a short presentation on of the completed project.**	
LO8		

Symbol of learning outcome	**Methods of assessing the learning outcomes**	**Type of tuition during which the outcome is assessed**
LO1	**project documentation and oral performance in project's classes**	
LO2	**project documentation**	

LO3	project documentation	
LO4	project documentation	
LO5	project documentation	
LO6	project documentation	
LO7	oral performance in project's classes	
LO8		
Student workload (in hours)		No. of hours
Calculation	work on the project	130
	consultations	30
	preparation to the defence of the project	20
	TOTAL:	180

Quantitative indicators	HOURS	No. of ECTS credits
Student workload – activities that require direct teacher participation	30	1
Student workload – practical activities	180	6

Basic references	1. Seip G.G.: Electrical Installations Handbook. John Wiley and Sons. Third Edition, 2000. 2. Atkinson Bill: Electrical installation design. John Wiley and Sons, Fourth Edition, 2013. 3. Standards IEC 60364:Low voltage installations 4. Electrical installation guide. According to IEC international standards. Schneider Electric. Edition 2016
Supplementary references	1. Electrical installation handbook. Protection, control and electrical devices. Technical guide- 6-th edition 2010. ABB Sace

Organisational unit conducting the course	Department of Electrotechnics, Power Electronics and Power Engineering	Date of issuing the programme
Author of the programme	Marcin A. Sulkowski PhD, Eng	13.01.2020

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work,

S – seminar