

## COURSE DESCRIPTION CARD

Faculty of Electrical Engineering										
Field of study	Electrical and Electronics Engineering							Degree level and programme type	Bachelor's degree, full time programme	
Specialization/ diploma path	-							Study profile	-	
Course name	Project in IT networks							Course code	IS-FEE-10042S	
								Course type	elective	
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	summer	
				30				No. of ECTS credits	6	
Entry requirements	-									
Course objectives	Acquiring skills in creating and presenting projects of telecommunication and computer networks.									
Course content	Students prepare individual projects of the network structure for assumed enterprises (usually with a few departments). In typical case the prepared project includes a selected components like telephone network, computer network with security solutions, dedicated power supply network and some specific components like alarm signaling network or internal television system (CCTV). The finished project should include analysis of demands, suggestion of solutions, diagrams of network structure and cost calculation (capex and opex). The project can also include other parts, specific for particular application (e.g. analysis of legal aspects of using radio devices). The prepared projects are presented and discussed during classes.									
Teaching methods	Discussion, projects									
Assessment method	projects completion, presentation and discussion of the projects									
Symbol of learning outcome	Learning outcomes <i>After completing this subject student is able to:</i>							Reference to the learning outcomes for the field of study		
LO1	obtain information from the literature, databases, and other sources for the project;									
LO2	choose suitable contemporary network solutions and technologies in order to fulfill determined requirements,									
LO3	design network structure according to given requirements									
LO4	create written documentation of the network design,									
LO5	present, discuss and defend prepared project.									
Symbol of learning outcome	Methods of assessing the learning outcomes							Type of tuition during which the outcome is assessed		

L01	project documentation	
L02	project documentation	
L03	project documentation	
L04	project documentation	
L05	oral presentation and discussion	
<b>Student workload (in hours)</b>		<b>No. of hours</b>
<b>Calculation</b>	preparation of the project of the network structure:	80
	work on documentation of the project:	30
	consultations:	15
	preparation to the presentation and defense of the project:	25
	<b>TOTAL:</b>	<b>150</b>
<b>Quantitative indicators</b>		<b>HOURS</b>
		<b>No. of ECTS credits</b>
<b>Student workload – activities that require direct teacher participation</b>		<b>15</b>
<b>Student workload – practical activities</b>		<b>150</b>
<b>Basic references</b>	1. Comer D.E., Internetworking with TCP/IP, Vol 1, Sixth edition, Addison-Wesley, 2013. 2. Sportack M., IP Addressing Fundamentals, Cisco Press, 2002. 3. Documentation of the IT equipment and components.	
<b>Supplementary references</b>	1. Anderson R. J., Security Engineering: A Guide to Building Dependable Distributed Systems, Second edition, Wiley, 2008.	
<b>Organisational unit conducting the course</b>	Department of Photonics, Electronics and Lighting Technology	Date of issuing the programme
<b>Author of the programme</b>	Andrzej Zankiewicz, PhD	17.01.2020

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

S – seminar