

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Extra High Voltage Cable Lines		Code 1010311271010317235
Field of study Electrical Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 4 / 7
Elective path/specialty High Voltage Engineering	Subject offered in: polish	Course (compulsory, elective) elective
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: 1		No. of credits 2
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 2 100%
Responsible for subject / lecturer: prof. dr hab. inż. Aleksandra Rakowska email: aleksandra.rakowska@put.poznan.pl tel. +48 61 6652616 Electrical Engineering ul. Piotrowo 3A 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has the knowledge on electrical material fundamentals and high voltage engineering
2	Skills	Student has the ability to choose to proper insulating materials for high voltage systems
3	Social competencies	Student is awared of expanding his knowledge, ability and his competences
Assumptions and objectives of the course: Poznanie nowoczesnych konstrukcji kabli elektroenergetycznych wysokich (WN) i najwyższych napięć (NN). Poznanie rozwiązań osprzętu kablowego. Poznanie nowoczesnych kablowych układów izolacyjnych.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student has extended knowledge in the scope of electric power equipment construction - [K_W08++] 2. Student has systematic and theoretical knowledge in the scope of power grid operation - [K_W13+]		
Skills:		
1. Student is able to use technical licerature, catalogues, technical manuals. Is able to integrate to obtained information, properly interpret and draw conclusion - [K_U05++]		
Social competencies:		
1. Student is able to work creatively and with initiative in the field electric power engineering taking into consideration influence of design systems on environment - [K_K04++]		
Assessment methods of study outcomes		
1. Evaluation of the knowledge in time of proccet classes 2. Evaluation of the prepared projects.		
Course description		
Konstrukcje kabli elektroenergetycznych wysokich (WN) i najwyższych napięć (NN). Osprzęt kabli wysokich i najwyższych napięć. Nowoczesne materiały stosowane do produkcji kabli. Doświadczenia eksploatacyjne dotyczące linii kablowych WN i NN. Przykładowe linie kablowe WN.		

Basic bibliography:		
1. Catalogues of high and extra high voltage power cables; catalogues of power cable accessories		
2. Inżynieria wysokich napięć w elektroenergetyce, pod red. H. Mościckiej-Grzesiak, Wydawnictwo Politechniki Poznańskiej, Tom I, Poznań, 1996		
3. Rakowska A., Kable i linie kablowe prądu stałego, Wydawnictwo Politechniki Poznańskiej, 2012		
Additional bibliography:		
1. McAllister D., Electric cables handbook, BICC, Granada, London, 1987		
2. Technical papers in journals and conference proceedings		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in project classes	15	
2. Preparation for project classes	10	
3. Project preparation	15	
4. Consultation	10	
Student's workload		
Source of workload	hours	ECTS
Total workload	50	2
Contact hours	25	1
Practical activities	25	1