

FACULTY OF ELECTRICAL
ENGINEERING**SUBJECT CARD**

Name in Polish: **Praca dyplomowa magisterska**
 Name in English: **Master's thesis**
 Main field of study (if applicable): **Control Engineering and Robotics**
 Specialization (if applicable): **Automation and Control in Electrical Power Systems**
 Level and form of studies: **2nd level, full-time**
 Kind of subject: **optional**
 Subject code: **ARR043159D**
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):				180	
Number of hours of total student workload (CNPS):				540	
Form of crediting:				crediting with grade	
For group of courses mark (X) final course:					
Number of ECTS points:				18	
including number of ECTS points for practical (P) classes :				18	
including number of ECTS points for direct teacher-student contact (BK) classes:				12.60	

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES**SUBJECT OBJECTIVES****SUBJECT EDUCATIONAL EFFECTS***relating to knowledge:**relating to skills:*

PEK_U01 xx

PEK_U02 xx

relating to social competences:

PEK_K01 xx

PROGRAMME CONTENT

Form of classes - project		Number of hours:
Proj 1	xx	180
Total hours:		180

TEACHING TOOLS USED**EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT**

Evaluation <i>F - forming (during semester) P - concluding (at semester end)</i>	Educational effect number	Way of evaluating educational effect achievement
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PRIMARY AND SECONDARY LITERATURE**PRIMARY LITERATURE:**

- [1] Paska J., Wytwarzanie energii elektrycznej, OWPW, Warszawa 2005.
- [2] Paska J., Wytwarzanie rozproszone energii elektrycznej i ciepła, OWPW, Warszawa 2010.
- [3] Marecki J., Podstawy przemian energetycznych, WNT, Warszawa 2014.
- [4] Chmielniak T., Technologie energetyczne, WNT, Warszawa 2008.

SECONDARY LITERATURE:

- [1] Pawlik M., Strzelczyk F., Elektrownie, WNT, Warszawa 2010.
- [2] Szargut J., Zadania z termodynamiki technicznej, Wyd. Pol. Śląskiej, Gliwice 2013.
- [3] Skorek J., Kalina J., Gazowe układy kogeneracyjne. WNT, Warszawa 2005.

SUBJECT SUPERVISOR

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
ARR043159D - Master's thesis
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Control Engineering and Robotics**
AND SPECIALIZATION **Automation and Control in Electrical Power Systems**

Subject educational effect	Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)	Subject objectives	Programme content	Teaching tool number
PEK_U01	S2ASE_U14		Proj1	
PEK_U02	S2ASE_U14		Proj1	
PEK_K01	K2AiR_K04 K2AiR_K06		Proj1	