

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 of Machines, Vehicles and Apparatus**
 Level and form of studies: **2nd level, full-time**
 Kind of subject: **optional**
 Subject code: **ARR041159D**
 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	x	0
Total hours:		0

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] Charoy A., Zakłócenia w urządzeniach elektronicznych, t. 1-4, WNT, Warszawa 1999.
[2] Sowa A., Kompleksowa ochrona odgromowa i przepięciowa, Biblioteka COSiW SEP, Warszawa, 2005.
[3] Frąckowiak L., Energoelektronika, Cz. 2, Wyd. Politechniki Poznańskiej, Poznań, 2000.

SECONDARY LITERATURE:

- [1] Więckowski T., Badania kompatybilności elektromagnetycznej urządzeń elektrycznych i elektronicznych, Oficyna Wydawnicza PWr, Wrocław, 2001.
[2] Praca zbiorowa pod red. D.J. Bena, Impulsowe narażenia elektromagnetyczne, Wyd. Politechniki Wrocławskiej, Wrocław, 1994.
[3] Haase P., Overvoltage protection of low voltage systems, IEE, London, 2000.
[4] Prasad Kodali V., Engineering Electromagnetic Compatibility, IEEE Press, New York, 1996.

SUBJECT SUPERVISOR

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
ARR041159D - Master's thesis
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Control Engineering and Robotics**
AND SPECIALIZATION **Automation of Machines, Vehicles and Apparatus**

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	S2AMPU_U14		Proj1	
PEK_U02	S2AMPU_U14		Proj1	
PEK_K01	K2AiR_K04 K2AiR_K06		Proj1	