

FACULTY OF ELECTRICAL
ENGINEERING**SUBJECT CARD**

Name in Polish: **Praca dyplomowa magisterska**
 Name in English: **Master's thesis**
 Main field of study (if applicable): **Industrial Control Engineering**
 Specialization (if applicable): **Automation of Machines, Vehicles and Apparatus**
 Level and form of studies: **2nd level, full-time**
 Kind of subject: **optional**
 Subject code: **APR011159D**
 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 LEARNING OUTCOMES***relating to knowledge:**relating to skills:*

PEU_U01 xx

PEU_U02 xx

relating to social competences:

PEU_K01 xx

PROGRAMME CONTENT

Form of classes - project		Number of hours:
Proj 1	x	0
Total hours:		0

TEACHING TOOLS USED**EVALUATION OF SUBJECT LEARNING OUTCOMES 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:

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

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

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