

FACULTY OF ELECTRICAL  
ENGINEERING**SUBJECT CARD**

Name in Polish: **Seminarium dyplomowe**  
 Name in English: **Diploma seminar**  
 Main field of study (if applicable): **Control Engineering and Robotics**  
 Specialization (if applicable):  
 Level and form of studies: **1st level, full-time**  
 Kind of subject: **optional**  
 Subject code: **ARR042058**  
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):					30
Number of hours of total student workload (CNPS):					90
Form of crediting:					crediting with grade
For group of courses mark (X) final course:					
Number of ECTS points:					3
including number of ECTS points for practical (P) classes :					3
including number of ECTS points for direct teacher-student contact (BK) classes:					2.10

**PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES**

1. Student has well-structured and with adequate theoretical foundation knowledge which is necessary for performing a B.Sc. thesis from a wide range of automation and control in electrical power systems.
2. Student can properly utilize acquired knowledge to complete a B.Sc. thesis from electrical power automation area.
3. Student can work in a team and understands a necessity of continuous improvement of his education.

**SUBJECT OBJECTIVES**

- C1. To develop fundamental skills related with presenting results of own work for completing complex engineering subject  
 C2. To develop skills of critical evaluation of results achieved by others during completing complex engineering subject.  
 C3. To acquire interpersonal skills related with active participation in discussion on the considered engineering problem.

**SUBJECT EDUCATIONAL EFFECTS***relating to knowledge:**relating to skills:*

- PEK\_U01 Student can retrieve information from literature and data bases on a given subject related to completed B.Sc. thesis.  
 PEK\_U02 Student has skills of utilizing acquired knowledge to creative analysis and resolution of different engineering problems, student has skills of formulating concise conclusions, preparing and delivering presentations.  
 PEK\_U03 Student can reliably evaluate the results of the other student, formulate questions and take active participation in discussion on the subjects related to the completed engineering theses.

*relating to social competences:*

- PEK\_K01 Student is aware of the responsibility for his own work, is open for exchange of ideas and new challenges.

**PROGRAMME CONTENT**

Form of classes - seminar		Number of hours:
Sem 1	Familiarization with the programme, requirements and a way of course passing.	2
Sem 2	Presentation of the results of work related to performed B.Sc. theses.	28
Total hours:		<b>30</b>

### TEACHING TOOLS USED

- N1. Seminar with use of audio-visual techniques, multimedia presentations, presentation foils  
N2. Discussion on problems of the presented material.

### 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
F1(s)	PEK_U01 PEK_U02 PEK_K01	Evaluation of individual presentations of students
F2(s)	PEK_U03 PEK_K01	Evaluation of activity during the seminar
P(s)	$P=0,7F1+0,3F2$	

### PRIMARY AND SECONDARY LITERATURE

#### PRIMARY LITERATURE:

Literature recommended for the student by his B.Sc. supervisor.

#### SECONDARY LITERATURE:

Literature gathered by the student during the literature survey for the performed thesis.

### SUBJECT SUPERVISOR

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### MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT ARR042058 - Diploma seminar AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Control Engineering and Robotics**

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	K1AIR_ASE_U10	C.1	Sem1 Sem2	N.1
PEK_U02	K1AIR_ASE_U10	C.1 C.2	Sem1 Sem2	N.1
PEK_U03	K1AIR_ASE_U10	C.2	Sem1 Sem2	N.2
PEK_K01	K1AiR_K09	C.3	Sem1 Sem2	N.1 N.2