

FACULTY OF MECHANICAL AND POWER ENGINEERING

SUBJECT CARD

Name of subject in Polish:	Seminarium dyplomowe magisterskie
Name of subject in English:	Master Seminar
Main field of study (if applicable):	Power engineering
Specialization (if applicable):	Refrigeration and cryogenic
Profile:	academic
Level and form of studies:	2nd level, full-time studies
Kind of subject:	optional-specialization
Subject code:	W09ENG-SM0082S
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)					60
Form of crediting					crediting with grade
For group of courses mark final course with (X)					
Number of ECTS points					2
including number of ECTS points for practical (P) classes					2
including number of ECTS points for direct teacher-student contact (BK) classes					1,5

*delete as applicable

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

Passing all subjects covered by the plan of study in semesters prior to graduation semester ("Diploma seminar" course is accompanied by the "Master of Science Diploma Dissertation" course).

SUBJECT OBJECTIVES

C1 – Improving skills in the search for selective knowledge needed to create their own original ideas and solutions, and prepare a presentation that allows pass them on to others meaningful way

C2 – Improving the ability to lead creative discussion during which can be justify the proposed solutions or ideas in a concrete and

C3 – Improving skills in the dissertation writing on a specific topic, presenting their own achievements against the background of known existing solutions

C4 – Shaping the beliefs about the need for permanent development of their personality in all its aspects

C5 – Developing a sense of conscientiousness and responsibility for the undertaken commitments, both to themselves and to others

SUBJECT LEARNING OUTCOMES

relating to skills:

PEU_U01 – Student can obtain information from a various sources necessary to comply energy systems projects in order to improve existing solutions

PEU_U02 – Student can prepare a coherent paper or presentation on the work carried out, containing the results of the proposed design solutions, technological or operational

PEU_U03 – Student is able to objectively justify the desirability of his/her original ideas and solutions during the discussion and critically evaluate the technical solutions proposed by others

relating to social competences:

PEU_K01 – Student understands the need to improve their professional and personal competence, is aware of the social consequences of engineering activities

PEU_K02 – Student is able to cooperate and actually behave in a group, actively participate in the discussions on the professional topics with cultural expression and respect for different views of other participants in the discussion

PEU_K03 – Student can think and act in a creative and enterprising manner, is able to define the priorities which determine the success of a scheduled task

Seminar		Number of hours
Sem1	Discussion of the substantive requirements of the diploma thesis, structure and scope the different types of dissertations. Presentation of the general principles of conduct the final exam. Set a schedule of the individual student presentations.	2
Sem2- Sem7	Individual students presentations on the current state of knowledge related to the issues of the realized diploma thesis, propose of the direction of further solutions. Discussions in the seminar group on the presented topics.	12
Sem8- Sem13	Individual presentations about the realized diploma thesis with emphasis on their original achievements with the discussions in the seminar group.	12
Sem14	Individual presentations - additional term	2
Sem15	Crediting with grade	2
	Total hours	

TEACHING TOOLS USED

- N1. Multimedia presentation.
- N2. Problematic discussion.
- N3. Individual work.

EVALUATION OF SUBJECT LEARNING OUTCOMES ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding)	Learning outcomes number	Way of evaluating learning outcomes achievement

(at semester end)		
F1	PEU_U01, PEU_U02, PEU_U03	Average rating for presentations, the ability to justify the advisability of the proposed solutions and the substantive referring to the proposals of other seminar participants.
F2	PEU_K01, PEU_K02, PEU_K03	Average rating for timely execution of the presentations, for the culture of speech, the ability to behave in a group and conduct discussions, for creativity and entrepreneurship.
$C=(2 \cdot F1+F2)/3$		
PRIMARY AND SECONDARY LITERATURE		
1. Literature related to the issues of the thesis		
SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)		
Dean of the Faculty		

*delete if not necessary