STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Preparation of the diploma thesis with elements of scientific**		Code **1010101171010119207**
Field of study **Sustainable Building Engineering First-cycle**	Profile of study (general academic, practical) **(brak)**	Year /Semester **4 / 7**
Elective path/specialty **-**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **First-cycle studies**	Form of study (full-time,part-time) **full-time**	
No. of hours Lecture: **-** Classes: **5** Laboratory: **-** Project/seminars: **-**		No. of credits **15**
Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**	
Education areas and fields of science and art **technical sciences** **Technical sciences**		ECTS distribution (number and %) **15 100%** **15 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge (on an engineering level) from the strength of building materials and mechanics, foundations of construction, metal, reinforced concrete, masonry and wooden constructions.
2	**Skills**	Ability to obtain information from different sources of knowledge, to prepare simple project documentation of simple objects.
3	**Social competencies**	Awareness of the necessity to broaden one's competences and take serious responsibility in future professional work.

Assumptions and objectives of the course:

The goal of the course:

? theoretical preparation of the student for the preparation of the diploma thesis, consisting in the development of individual topics, discussed in the diploma project

? familiarization with the methodology of preparing a diploma project with a descriptive part, setting a work plan - a discussion of the issues

? the originality of the work and the consequences of proving plagiarism

? discussion of the importance and preparation of preliminary analyzes, freehand sketches, etc.

? discussing the conclusions of the conducted analyzes and determining their impact on the selection of design solutions - presenting the assumptions and results of the project work

? preparation, delivery and preliminary assessment of the final presentation of the diploma thesis

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. is familiar with building code, national standards (PN) and European standards (EN) as well as technical conditions for construction works and low- energy buildings - [KSB_W07]

2. has basic knowledge in design of general infrastructure and sustainable road and railway transport - [KSB_W11]

3. is familiar with select computer software packages (including those using BIM technology) assisting in calculation and design of construction, building work organisation, cost estimation and technical amenities in buildings and software packages for assessment and design of low-energy buildings - [KSB_W12]

Skills:

1. knows how to retrieve information from literature, databases and other properly selected sources; knows how to integrate the information thus retrieved, how to interpret it and how to draw conclusions and formulate and justify opinions. - [KSB_U01]
2. knows how to retrieve information from literature, databases and other properly selected sources; knows how to integrate the information thus retrieved, how to interpret it and how to draw conclusions and formulate and justify opinions. - [KSB_U01]
3. knows how to use information and communication technologies typically used in implementation of engineering activities - [KSB_U02]
4. knows how to apply regulations of building code and legal acts regulating construction works - [KSB_U20]
5. knows how to plan and organise work both individual and in teams, knows how to collaborate with others, is prepared to work in team, is prepared to collaborate with other individuals in interdisciplinary design teams (specialists in different areas) - [KSB_U26]
Social competencies:
1. has the skill to adapt to new and changing circumstances, knows how to prioritise tasks in realisation of a job, also acting for the common good - [KSB_K01]
2. takes responsibility for reliability of results and their interpretation - [KSB_K02]
3. individually catches up on and expands his knowledge about modern techniques, processes and technologies - [KSB_K03]
4. understands the need for team work and is responsible for safety of hi work and the work of his team - [KSB_K04]
5. is aware of the necessity of developing professional and personal competencies; understands and is aware of possibilities of continuous learning (second and third cycle studies, postgraduate courses) - [KSB_K05]
6. is communicative in multimedia presentations - [KSB_K06]

Assessment methods of study outcomes
Completion of the course based on:
- evaluation of the presented thesis,
- the systematic nature of its implementation,
- technical problem solving skills.
Marks, grades: bardzo dobry (A) - 5,0; dobry plus (B) - 4,5; dobry (C) - 4,0; dostateczny plus (D) - 3,5; dostateczny (E) - 3,0; niedostateczny (F) - 2,0.
Course description
Compliant with the subject (topic)of the diploma thesis Teaching methods. The discussion with a graduate on current problems, explanations on a regular basis or providing sources in the subject literature.
Basic bibliography:
1. Bibliography conected with subject of eng thesis
Additional bibliography:
1. European and polish standards , law regulation

Result of average student's workload

Activity	Time (working hours)
1. Preparing for consultation, discussion (own work)	300
2. Participation in consultations related to the implementation of the education process	75

Student's workload

Source of workload	hours	ECTS
Total workload	375	15
Contact hours	75	3
Practical activities	300	0