STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Weak spots in the buildings**		Code **1010102131010116279**
Field of study **Civil Engineering Second-cycle Studies**	Profile of study (general academic, practical) **general academic**	Year /Semester **2 / 3**
Elective path/specialty **Structural Engineering**	Subject offered in: **Polish**	Course (compulsory, elective) **elective**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time) **full-time**	
No. of hours Lecture: **15** Classes: **-** Laboratory: **-** Project/seminars: **-**		No. of credits **2**
Status of the course in the study program (Basic, major, other) **major**	(university-wide, from another field) **from field**	
Education areas and fields of science and art **technical sciences** **Technical sciences**		ECTS distribution (number and %) **2 100%** **2 100%**

Responsible for subject / lecturer:

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Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	knowledge after first cycle studies after the civil engineering course or other technical studies
2	**Skills**	Student can design a construction barrier (e.g.wall, roof) due to thermals condition and taking into account the moisture conditions and static.
3	**Social competencies**	Awareness of the need to constantly update and supplement knowledge construction and engineering skills

Assumptions and objectives of the course:

Broadening and deepening knowledge of design, construction and renovation of buildings

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

Knowledge:

1. She/He knows rules about bulding barrier, knows rules about calculation - [K_W02,K_W03,K_W04,K_W07]]
2. She/He knows the basic principles of work of building elements - [K_W02,K_W03,K_W04,K_W07]
3. She/He knows the general and the technical requirements for design of building - [K_W02,K_W03,K_W04,K_W07]
4. She/He knows the modern solutions and requirements buildings - [K_W02,K_W03,K_W04,K_W07]

Skills:

1. She/He can classify buildings and recognize the state of emergency - [K_U01, K_U018, K_U05]
2. She/He can describe and analyse the causes of the problems of in the building - [K_U01,K_U018,K_U05]
3. She/He can design a proper repair solutions - [K_U01,K_U018,K_U05]

Social competencies:

1. She/He is acquires the ability to work in a team - [K_U16, K_K05K_K01]
2. She/He is able to set priorities for the implementation of specific actions - [K_U16, K_K05K_K01]

Assessment methods of study outcomes

-Assessment of knowledge: activity during classes and a lectures.
Points might be earned for:
the activity during the classes,
knowledge presented during the exam.
The grading scale determined% from:
90 very good (A)
85 good plus (B)
75 Good (C)
65 Adequate plus (D)
55 Sufficient 55 (E)
Less than 54 inadequate (F)
In doubtful cases the credit is extended oral worship.
exercises auditorium:
Term paper and presentation in the class.

Course description

-Lecture:
Discussion of structural elements: masonry-materials, causes scratches, repair ... Presentation of innovative solutions "weak spots" in the building point types
Classes:
Implementation and offer technical expertise of a building or building components.

Basic bibliography:

1. Praca zbiorowa pod kier. P .Klemma: Budownictwo ogólne t.2 wyd. Arkady 2005
2. Praca zbiorowa pod kier. P .Klemma? Budownictwo ogólne t.1,2,3 wyd. Arkady 2005
3. Vademecum projektanta : architektura, budownictwo, wnętrza : prezentacja nowoczesnych technik budowlanych / Przemysław Markiewicz.
4. Konstrukcje murowe : remonty i wzmocnienia / Lech Rudziński.

Additional bibliography:

1. Wentylacja dachów i stropodachów : poradnik / Krzysztof Patoka.
2. B.Ksit,B.Monczyński: Zabezpierczenie elementów budynku znajdujących się w gruncie. Izolacje przeciwwilgociowe i przeciwwodne. Verlag Daschofer sp.z o.o.2011
3. B.Ksit,B.Monczyński: Izolacje przeciwwilgociowe i przeciwwodne dachów płaskich i tarasów. Verlag Daschofer sp.z o.o.2012
4. aktualne normy

Result of average student's workload

Activity	Time (working hours)
1. 1 Preparing to pass the lecture	5
2. Participation for lectures	15
3. Participation in the consultation (minimum three consultations)	3

Student's workload

Source of workload	hours	ECTS
Total workload	50	2
Contact hours	18	1
Practical activities	10	0