

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Civil Engineering</b>		Code <b>1010104151010110063</b>
Field of study <b>Civil Engineering First-cycle Studies</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>3 / 5</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>part-time</b>	
No. of hours Lecture: <b>20</b> Classes: <b>8</b> Laboratory: <b>-</b> Project/seminars: <b>12</b>		No. of credits <b>6</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art <b>technical sciences</b>		ECTS distribution (number and %) <b>210 100%</b>
<b>Responsible for subject / lecturer:</b>  dr inż. Dariusz Janiszewski email: dariusz.t.janiszewski@put.poznan.pl tel. tel. 61 665 28 70 Faculty of Civil and Environmental Engineering ul. Piotrowo 5, 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic knowledge of building materials, physics and basic methods of mathematical analysis, strength of materials, structural mechanics
2	<b>Skills</b>	Students can: use-programs Excel (basic features) identify and describe building materials and their basic physical characteristics, can provide a layer of individual partitions, understands the basic laws governing the flow of heatbudyunku, wyznaczać naprężenia
3	<b>Social competencies</b>	Awareness of the need to constantly update and supplement knowledge construction and engineering skills. Understand the need for lifelong learning and knows how to interact and work in a group, taking the different roles.
<b>Assumptions and objectives of the course:</b> -Maximum knowledge transfer of construction engineering bases.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Student knows norms and guidelines of designing of construction objects and their elements, both within the range of materials and technology. - [-]		
2. Student knows the rules of constructions and the designing of masonry structures. - [-K_W07]		
3. Student knows rules of the constructions and analysis of chosen construction engineering objects and buildings - [-K_W09]		
4. Student knows basic regulations of the building law concerning designing and construction of construction engineering objects and buildings. - [-]		
<b>Skills:</b>		
1. Student can evaluate and make composition of basic loads acting on building objects. - [-K_U02]		
2. Student can design chosen elements and simple masonry structures.ektować wybrane elementy i proste konstrukcje murowe. - [-K_U07]		
3. Student can design simple foundations for construction engineering and buildings. - [-K_U09]		
4. Student can select materials and technologies of realization for different construction engineering objects and buildings. - [-]		
5. Student can apply basic regulations of the building law to the designing of construction engineering objects and buildings. - [-K_U19]		
<b>Social competencies:</b>		

1. Student is responsible for the honesty of obtained results of his own works and their interpretation. - [-K\_K02]
2. Student independently supplements and extends the knowledge of within the range of modern processes and technologies in case of construction engineering. - [-K\_K03]
3. Student has a consciousness of the necessity of the lifting of professional and personal competences. - [-K\_K06]
4. Student can formulate opinions on the subject of technical and technological processes in construction. - [-K\_K07]
5. Student pursues with rules of the ethics. - [-K\_K10]

### Assessment methods of study outcomes

-Assessment of knowledge:  
 activity during classes and a lectures  
 project, knowledge presented during the colloquium  
 written examination.

The grading scale determined from:

points:	grade:
upper 100	excellent (A+)
91	very good (A)
81	good plus (B)
71	good (C)
61	adequate plus (D)
51	adequate (E)
lower 50	inadequate (F)

### Course description

-Elements of buildings part 2.  
 Masonry structures and its designing.  
 Fire protection of buildings.

#### Basic bibliography:

1. Praca zbiorowa pod kier. P .Klemma: Budownictwo ogólne t.2 wyd. Arkady 2005
2. Płoński, Pogorzelski : Fizyka budowli Arkady 1976
3. aktualne normy(PN-EN ISO 6946:2008,PN-EN ISO 13370, PN-EN ISO 10211-1:1998,PN-EN ISO 13788:2003 )
4. Rozporządzenie Ministra Infrastruktury z 12 kwietnia 2002 w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie. (Dz. U. nr 75 z 15 czerwca 2002r., poz.690 wersja:2009.07.08 lub późniejsze oraz z 2003 r. Nr 33, poz. 270)
5. Nowoczesne wyposażenie domu jednorodzinne, praca zbiorowa pod red. prof. dr hab. inż. Halina Koczyk, PWRiL Poznań
6. J. Jasiczak, M. Kuinski, M. Siewczyńska - Obliczanie izolacyjności termicznej i nośność murowanych ścian zewnętrznych. Wyd. Politechniki Poznańskiej

#### Additional bibliography:

1. B.ksit,B.Monczyński: Zabezpieczenie elementów budynku znajdujących się w gruncie. Izolacje przeciwwilgociowe i przeciwwodne.Verlag Daschofer sp.z o.o.2011
2. B.Ksit,B.Monczyński: Izolacje przeciwwilgociowe i przeciwwodne dachów płaskich i tarasów. Verlag Daschofer sp.z o.o.2012
3. Hydroizolacje w budownictwie, Maciej Rokiel 2005

### Result of average student's workload

Activity	Time (working hours)
1. participation in lectures	20
2. participation in ex. auditorium	8
3. participation in projects	12
4. project realisation	15
5. preparation to ex. auditorium	10
6. preparation to attend and pass the colloquium	10
7. participation in the consultation	8
8. preparation to and attendance in examination	20

<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	145	6
Contact hours	52	2
Practical activities	65	3