

| STUDY MODULE DESCRIPTION FORM | | |
|---|---|--|
| Name of the module/subject Civil Engineering | | Code 1010104141010110063 |
| Field of study Civil Engineering First-cycle Studies | Profile of study (general academic, practical) (brak) | Year /Semester 2 / 4 |
| Elective path/specialty - | Subject offered in: Polish | Course (compulsory, elective) obligatory |
| Cycle of study: First-cycle studies | Form of study (full-time, part-time) part-time | |
| No. of hours Lecture: 20 Classes: - Laboratory: - Project/seminars: 12 | | No. of credits 4 |
| 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 %) 4 100% 4 100% |
| Responsible for subject / lecturer: dr inż. Dariusz Janiszewski email: dariusz.t.janiszewski@put.poznan.pl tel. 61 665 28 70 Faculty of Civil and Environmental Engineering ul. Piotrowo 5, 60-965 Poznań | | |
| Prerequisites in terms of knowledge, skills and social competencies: | | |
| 1 | Knowledge | Basic knowledge of building materials, physics and basic methods of mathematical analysis, strength of materials, structural mechanics |
| 2 | Skills | 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 heat in a building, determine stresses |
| 3 | Social competencies | 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. |
| Assumptions and objectives of the course: -Maximum knowledge transfer of construction engineering bases. | | |
| Study outcomes and reference to the educational results for a field of study | | |
| Knowledge: | | |
| 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. - [-] | | |
| Skills: | | |
| 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] | | |
| Social competencies: | | |

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,

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

-The responsibility of civil engineer occupation.
 What is the construction engineering?
 Elements of buildings part 1.

Basic bibliography:

1. Gaczek Mariusz, Jasiczak Józef, Kuiński Marek, Siewczyńska Monika, Izolacyjność termiczna i nośność murowanych ścian zewnętrznych. Rozwiązania i przykłady obliczeń, Wydawnictwo Politechniki Poznańskiej 2011
2. Praca zbiorowa, Budownictwo Ogólne: Elementy budynków podstawy projektowania, t. 3, Arkady, 2008
3. Schabowicz Krzysztof, Pietraszek Piotr, Hoła Jerzy, Obliczanie konstrukcji budynków wznoszonych tradycyjnie, DWE, 2010
4. Gorzelańczyk Tomasz, Schabowicz Krzysztof, Materiały do ćwiczeń projektowych z budownictwa ogólnego, DWE, 2009 (wyd. II ? 2011)
5. Neufert Ernst, Podręcznik projektowania architektoniczno ? budowlanego, Arkady, 2009
6. Bożenna Wapińska, Mirosława Popek, Podstawy budownictwa. Podręcznik, WSiP, 2009
7. Kotwica Janusz, Konstrukcje drewniane w budownictwie tradycyjnym, Arkady, 2006

Additional bibliography:

1. Żenczykowski Wacław, Budownictwo Ogólne, t. 2.1, 2.2, 3.1, 3.2, Arkady 1987
2. Korzeniewski Włodzimierz, Budownictwo jednorodzinne. Wymagania użytkowe i warunki techniczne, COIB, 1998
3. Michalak Hanna, Pyrak Stefan, Domy jednorodzinne. Konstruowanie i obliczanie, Arkady, 2000

Result of average student's workload

| Activity | Time (working hours) |
|--------------------------------------|----------------------|
| 1. participation in lectures | 20 |
| 2. participation in projects | 12 |
| 3. participation in the consultation | 10 |
| 4. project realisation | 20 |
| Student's workload | |
| Source of workload | hours |
| Total workload | 100 |
| Contact hours | 42 |
| Practical activities | 22 |
| | ECTS |
| Total workload | 4 |
| Contact hours | 2 |
| Practical activities | 1 |

