STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Geotechnical Training		**1010101141010120301**
Field of study	Profile of study (general academic, practical)	Year /Semester
Civil Engineering First-cycle Studies	**general academic**	**2 / 4**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**obligatory**
Cycle of study:	Form of study (full-time,part-time)	
First-cycle studies	**full-time**	
No. of hours		No. of credits
Lecture: **-** Classes: **40** Laboratory: **-** Project/seminars: **-**		**3**
Status of the course in the study program (Basic, major, other)	(university-wide, from another field)	
other	**university-wide**	
Education areas and fields of science and art		ECTS distribution (number and %)
technical sciences		**3 100%**

Responsible for subject / lecturer:

dr inż. Sławomir Janiński
email: slawomir.janinski@put.poznan.pl
tel. 6652417
Faculty of Civil and Environmental Engineering
ul. Piotrowo 5 60-965 Poznań

Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	A full range of knowledge in mathematics and physics included in the program of high school. A full range of knowledge covered by the program of studies 1 and 2 semester majoring in construction, in particular in the field of soil mechanics, foundations and fundamentals of geology
2	**Skills**	Student: - knows how to apply the principles of recognition of soil mechanisc to determine the models of subsoil; - is able to apply the basic laws of soil mechanics to determine the state of stress, strength and deformability of the ground; - be ableto design a simple foundations of buildings; - can apply methods to ensure slope stability foundation trenches
3	**Social competencies**	Student: - he is able to work independently and collaborate in a team on specific task; - he is responsible for the accuracy obtained results of their work; - isolated complements and extends the knowledge of modern techniques,processes and technologies

Assumptions and objectives of the course:

Enhancing knowledge of soil mechanics and foundation and skills in its application in practis

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

Knowledge:

1. In acquainted with construction law, nationalnorms andEN standardsand technical conditions for of structure construction - [-K_W06]
2. Knows geology fundamentals,soil mechanisc and foundations construction structuresvaluate - [-K_W08]
3. Knowsrules related to the design and analysis of residential, industraial, road,railroad and bridge structures - [-K_W09]

Skills:

1. Can evaluate and list loads acting on structures - [-K_U02]
2. Can appropriately define computional models used for the structur analysis - [-K_U03]
3. Can design simple foundations of structures for residental, public, industrial construction engineering, road, railways, bridges infrastructures - [-K_U09]

Social competencies:

1. Can work on a problem individually and in a team - [-K_K01]
2. Is aware of own health and fitness - [-K_K04]
3. Is aware of the necessity to advance professional and personal competencies - [-K_K06]

Assessment methods of study outcomes
- oral tests as part of the continuous assessment - execution of studies containing results and analysis geotechnical
Course description
- programming geotechnical testing ground -perform geotechnical testing ground to determine the geotechnical foundation conditions of builings; - interpretation of the results of gotechnical studies of the substrate; - analysis of geotechnical foundation conditions of buildings; - technologies for earth moving and foundation
Basic bibliography:
1. Wiłun Z.: Zarys geotechniki, Warszawa, WKiŁ 2012 2. Pisarczyk St.: Gruntozawstwo inżynierskie, Warszawa, PWN 2001 3. Szymański A.: Mechanika Gruntów, SGGW, Warszawa 2007 4. Rybak Cz., Puła O., Sarniak W.:Fundamentowanie, DWE 1997
Additional bibliography:
1. Jeż J.: Biogeotechnika, Poznań, Wyd. PP 2008 2. Motak E.: Fundamenty bezpośrednie, Warszawa, Arkady 1988 3. Obrycki M., Pisarczyk St.: Zbiór zadań zmechaniki gruntów,Warszawa, PW 2007 4. Puła O. Projektowanie fundamentów według Eurokodu 7. Wyd. 2., DWE, Wrocław 2012

Result of average student's workload

Activity	Time (working hours)
1. participation in classes and individual work	90

Student's workload

Source of workload	hours	ECTS
Total workload	90	3
Contact hours	30	1
Practical activities	60	2