STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Foundation**		Code **1010101141010121115**
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) **full-time**	
No. of hours Lecture: **15** Classes: **15** Laboratory: **-** Project/seminars: **15**		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		ECTS distribution (number and %)

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	- full range of knowledge of mathematics and physisc, the program for high school - full range of knowledge covered by the program of studies 1 and 2 of semester studies at Construction
2	**Skills**	The Student: - is able to perform static analysis of bar structures statically detereminate, - is able to correctly select troubleshooting tools analysis and design of buildings, - can dimensions the basic structural components of buildings
3	**Social competencies**	The Student: - is able to work intependently and collaborate as a team on the specific task; - is responsible for the accuracy of the results of their work and their interpretation - isolated complements and extends knowledge of modern techniques processes and tehnology

Assumptions and objectives of the course:

achieve a basic level of knowledge of groundwater and soil mechanics applicable to first degree studies of construction

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

Knowledge:

1. The Student know fundamentals of groundwater expert knowledge - [K_W06]
2. The Student know the basic laws of soilmechanic - [K_W08]
3. The Student know methods for determining stresses in the subsoil - [K_W09]

Skills:

1. The Studnet is able to apply the principles for classification of soil - [K_U02]
2. The Student is able to make interpretation of the results of laboratory testes the basic features of soil - [K_U03]
3. The Student is able to use the basic rights of soil mechanics to determinate the stresses in the subsoil - [K_U09]

Social competencies:

1. The Student is aware of the need to care for their own health and fitness - [K_K01]
2. The Student is aware of the need to improving of professional and personal of competence - [K_K04]
3. The Student understands the need to inform the public knowledge of the construction industry, provide information to the public of construction in a commonly understood - [K_K06]

Assessment methods of study outcomes
- the written examination, - the written and oral tests as part of the continuous assessment, - the execution of a handbook of results of calculations of laboratory characteristics of the subsoil
Course description
- introduction to groundwater expert knowledge
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. The total amount of work	120

Student's workload

Source of workload	**hours**	**ECTS**
Total workload	120	4
Contact hours	60	2
Practical activities	60	2