

COURSE DESCRIPTION							
Type of study	full-time 1st degree (BSc)			Field of study	Civil Engineering		
Specialization	Structural Engineering						
Code	Course name (acc. to curricula of study)				ECTS point		
B05133	Soil mechanics				5		
Unit running the course					Semester		
Dep. of Road Engineering, Geotechnics and Geodesy					V		
Number of hours in semester	L – 30	A – 0	Lb – 30	Ws – 0	D – 0	S – 0	
Learning outcomes							
Recognition of subsoil for design of foundation. Identification of physical and mechanical parameters of soils.							
Prerequisites:							
Mathematics, mechanics, strength of materials							
Frame programme							
Nature of soils. Gravimetric and volumetric relationships. Physical parameters of soils. Soil classification. Laboratory and in-situ tests. Permeability. Effective and total stress. Strength of soils. Stress-strain behaviour. Stress distribution in the soil subbase. Limit states. Theory of consolidation. Saturated and non-saturated soils. Slope stability. Soil compaction. Pressure of soil on structure.							
Form of lecture assessment							
Kolloquium	<input type="checkbox"/>	Final test	<input type="checkbox"/>	Written exam	<input checked="" type="checkbox"/>	Oral exam	<input checked="" type="checkbox"/>
References:							
1. Z. Wilun: Zarys geotechniki, Wydawnictwo Komunikacji i Łączności, W-wa 2000							
2. S. Pisarczyk: Mechanika gruntów, Wyd. Politechniki Warszawskiej, W-wa 1992							
3. T. Jeske, T. Przedecki, B. Rossiński: Mechanika gruntów, PWN, W-wa -Wrocław 1966							
4. T.W. Lambe, R.V. Whitman: Mechanika gruntów, t.1 i 2, Arkady, W-wa 1978							
5.							
6.							
7.							
8.							
The content was worked out by: Dr hab. inż. Z. Szypcio					Date: 2008-02-15		
Supervisor of unit (department): dr hab. inż. W. Gardziejczyk, prof. PB							

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