Name of subject:	Construction Materials II.	Neptun code:	BMEEOEMAS41	
Lecturer/s:	Dr. Olivér FENYVESI			
Weekly detailing of the program:				
week	**Lectured syllabi**		**Laboratory syllabi**	Mid term tests / H.W.
1.	Aspects and requirements of selection of construction materials. Application fields of construction materials.		Metal corrosion, hardness and impact strength	
2.	-		Testing od deformations	
3.	Shrinkage and deformations of concrete and other cementitious materials, early age shrinkage cracking, influencing parameters, internal curing effect		NDT tests on building site	
4.	-		Building diagnostics	H.W. (issuance)
5.	Fibre reinforced concrete, mechanical properties, fresh concrete properties, durability, fire resistance, . Lightweight concretes, types, aggregate production, test methods, mechancial and hydrotechnical properties of LWCs.		Surface protection	
6.	-		Mortars	
7.	Midterm test		Thermal and acoustic insulations	Midterm test
8.	-		Organic binders, consistency	
9.	Metals. Aluminium and aluminium alloys. Production of iron and steel. Phase behaviour of iron-carbon alloys. Morphology of metals. Martenzit. Heat treatments for steel. Stainless steels. Corrosion of steel, protection against corrosion of metals.		Special concretes	Repetition of midterm test
10.	-		Concrete pavements and roads	
11.	*Student Scientific Conference - No lecture*		Wall, slab and roofing elements	
12.	-		Glass properties	
13.	Polymers. Paints and surface layers. Pavement markings.		Computing practices	
14.	-		Computing practices (preexamination).	Submission of Homework

Possible repetitions:	Late submission of H.W., Repeated mid term test..
Requirements to fulfil during the study period:	Successful mid term test, Submission of homework. Minimum number of points is 50%.
Examination:	Written, and on request possibility to improve orally if the written part is successful (50%).
Final evaluation:	performance during the study period 40%, examination result 60%.