

# REINFORCED CONCRETE AND MASONRY STRUCTURES (BMEEOHSAS42)

## Schedule of theoretical and practical lectures - 2018/2019 fall

Week	Date	Theoretical lectures Tuesday 8:15-10:00 (K.f12)	Tests	Practical lectures (#) Tuesday 10:15-12:00 (K.f12)	Release and submission of homework
		<i>Dr. Kálmán Koris</i>		<i>Dr. Zsolt Huszár - Dr. Gabriella Tarján - Zsuzsa Borbála Pap</i>	
1	4 <sup>th</sup> Sept.	Introduction, configuration and behaviour of RC frames. Modelling with shear beam. Approximate calculation of bending moment.			
2	11 <sup>th</sup> Sept.	Imperfections, second order effects, column in a frame. Reinforcement of RC frames.		Approximate and Axis calculation of bending moments in a frame, horizontal drift.	Release of 1 <sup>st</sup> Homework (frame, bracing system)
3	18 <sup>th</sup> Sept.	Bracing of RC buildings. Statically determinate and indeterminate bracing systems. Reinforcement of RC walls.			
4	25 <sup>th</sup> Sept.	Load bearing of slabs, typical internal forces, strip method.		Frame and wall imperfections, stability, reinforcement, distribution of loads among the shear walls.	
5	2 <sup>nd</sup> Oct.	Flat slabs. Punching shear analysis of flat slabs. Continuous slabs systems.			Submission of 1 <sup>st</sup> Homework (Friday 12:00)
6	9 <sup>th</sup> Oct.	Concentrated forces, one way spanning slabs, openings. Reinforcement of slabs.	1 <sup>st</sup> Test (80 min) 10.10.2018 16:00-18:00 Kmf.26.	Calculation of slabs with Axis. Strip method. Reinforcement of slabs. Reinforcement drawing.	Release of 2 <sup>nd</sup> Homework (slabs)
7	16 <sup>th</sup> Oct.	Basic thesis of plasticity theory. Plastic design of slabs. Menyhárd's method.			
8	23 <sup>th</sup> Oct.	<i>Lecture is cancelled (National holiday)</i>		<i>Lecture is cancelled (National holiday)</i>	
9	30 <sup>th</sup> Oct.	Masonry structures.			Submission of 2 <sup>nd</sup> Homework (Friday 12:00)
10	6 <sup>th</sup> Nov.	2 <sup>nd</sup> Test	2 <sup>nd</sup> Test (80 min) 06.11.2018 8:15-10:00 K.f12.	Collapse load of slabs. Menyhárd's method. Flat slabs.	Release of 3 <sup>rd</sup> Homework (flat slab, detailing, masonry)
11	13 <sup>th</sup> Nov.	Masonry structures.			
12	20 <sup>th</sup> Nov.	Stairs (numerical example), corbel (numerical example), strut and tie model, introduction of forces (numerical example), direct compression.		Punching shear. Masonry structures.	
13	27 <sup>th</sup> Nov.	Stairs, corbel, strut and tie model, introduction of forces, direct compression - continued.			Submission of 3 <sup>rd</sup> Homework (Friday 12:00)
14	4 <sup>th</sup> Dec.	Foundations, prestressing.	3 <sup>rd</sup> Test (80 min) 04.12.2018 16:00-18:00 Kmf.26.	Consultation.	