Analysis of Rods and Frames

(MSc)

BME EOTM MN63

2nd semester, 2018/19

Week	Lectures/exercises (Thursday 14.15-16.00, KM78)	
1	Feb 7	Basics of mathematics: matrix algebra, coordinate systems, calculus
2	Feb 14	Frames: characteristics of a general bar element (of curved axis and variable cross section), basic relationships
3	Feb 21	Frames: stiffness matrix and reduced load vector
4	Feb 28	Frames: special connections (eccentric, elastic, partial)
5	Mar 7	Frames: solutions with the displacement method
6	Mar 14	Special cases: planar frames
7	Mar 28	**Test 1: Frames**
8	Apr 4	Special cases: grid structures
9	Apr 11	Special cases: trusses
10	Apr 18	Special cases: beams on elastic foundations, infilled frames
11	Apr 25	Higher-order theories: suspension bridges
12	May 2	Higher-order theories: bar networks
13	May 9	Preparation for Test 2
14	May 16	**Test 2: Special structures**

Budapest, 13th December 2018

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