

Basics of Statics and Dynamics

BSc

2018/19, autumn semester

(Mon 14.15-16.00, KM78/KF10 – Wed 10.15-13.00, KM78/KF10)

Week	Date	Topic
1	03 Sep	Introduction, vector operations, rectilinear motion of a particle
	05 Sep	Kinematics of a particle: circular motion; motion along a curved path
2	10 Sep	Newton's laws, resultant of concurrent forces
	12 Sep	Kinetics of particles, theorems; moment of forces, couple
3	17 Sep	Resultant of force systems, centroid of 2D objects
	19 Sep	Centroid and kinetics of rigid bodies
4	24 Sep	Forces in 3D
	26 Sep	Constraints; reactions of simple structures
5	01 Oct	TEST 1: Forces and motion
	03 Oct	Reactions of simple structures
6	08 Oct	Reactions of compound structures
	10 Oct	Reactions of Gerber girders
7	15 Oct	Reactions of three hinged frames, statical determinacy
	17 Oct	Truss analysis
8	22 Oct	---
	24 Oct	Structures in 3D
9	29 Oct	TEST 2: Reactions of structures
	31 Oct	Internal forces
10	05 Nov	REPETITION OF TEST 1
	07 Nov	Internal forces
11	12 Nov	Internal force diagrams – basics
	14 Nov	---
12	19 Nov	Internal force diagrams of simply supported and cantilever beams
	21 Nov	Internal force diagrams of Gerber beams
13	26 Nov	REPETITION OF TEST 2
	28 Nov	Internal force diagrams of frames
14	03 Dec	TEST 3: Internal force diagrams
	05 Dec	Internal forces in 3D
rep		REPETITION OF TEST 3
rep		2nd REPETITION / EXAMINATION

19 Apr 2018

András Lengyel
(lecturer)

Péter Nédli
(lecturer)

Éva Lakatos
(lecturer)