

MEC-E1010 Dynamics of Rigid Body (Period I, 2022): preliminary schedule (12.8.2022)

Week	Date	Lectures	Exercises	Calculation hours (CH) and demos	Topics of the lecture
36	5.9.2022	Mon	Lecture 1	Ex 0 & 1 =>	Basic considerations, relative and absolute observations, coordinate systems, rates of change of vectors, EOMs for particle
	6.9.2022	Tue		CH 0	
	7.9.2022	Wed			
	8.9.2022	Thu	Lecture 2	Ex 0 <=	Spherical coordinate system, rates of change of vectors
	9.9.2022	Fri		Demo 0	
	10.9.2022	Sat			
	11.9.2022	Sun			
37	12.9.2022	Mon	Lecture 3		Kinematics of rigid bodies: body fixed coordinate frame, orientation of a body (Euler angles)
	13.9.2022	Tue		CH 1	
	14.9.2022	Wed		Ex 2 =>	Kinematics of rigid bodies: relative motion, relative motion of rigid bodies
	15.9.2022	Thu	Lecture 4	Ex 1 <=	
	16.9.2022	Fri		Demo 1	
	17.9.2022	Sat			
	18.9.2022	Sun			
38	19.9.2022	Mon	Lecture 5		Kinetics of rigid bodies: angular momentum, conservation of angular momentum, mass properties
	20.9.2022	Tue		CH 2	
	21.9.2022	Wed		Ex 3 =>	Kinetics of rigid bodies: EOMs for rotational motion - examples and special cases for EOMs
	22.9.2022	Thu	Lecture 6	Ex 2 <=	
	23.9.2022	Fri		Demo 2	
	24.9.2022	Sat			
	25.9.2022	Sun			
39	26.9.2022	Mon			NOTE: no lectures on week 39
	27.9.2022	Tue		CH 3	
	28.9.2022	Wed			
	29.9.2022	Thu		Ex 3 <=	NOTE: no lectures on week 39
	30.9.2022	Fri		Demo 3	
	1.10.2022	Sat			
	2.10.2022	Sun			
40	3.10.2022	Mon	Lecture 7	Ex 4 & Ex 5=>	Analytical mechanics
	4.10.2022	Tue		CH 4	
	5.10.2022	Wed			Analytical mechanics
	6.10.2022	Thu	Lecture 8	CH 5	
	7.10.2022	Fri			
	8.10.2022	Sat			
	9.10.2022	Sun			
41	10.10.2022	Mon	Lecture 9		Analytical mechanics
	11.10.2022	Tue		CH 6	
	12.10.2022	Wed			Review lecture
	13.10.2022	Thu	Lecture 10	Ex 4 & Ex 5<=	
	14.10.2022	Fri		Demo 4 & 5	
	15.10.2022	Sat			
	16.10.2022	Sun			
42	17.10.2022	Mon			
	18.10.2022	Tue			
	19.10.2022	Wed	EXAM		
	20.10.2022	Thu			
	21.10.2022	Fri			
	22.10.2022	Sat			
	23.10.2022	Sun			

Lectures: Mondays 12:15 (lecture hall announced later)
 Thursdays 12:15 (lecture hall announced later)
Calculation hours (CH): Tuesdays 12:15 (lecture hall announced later)
Demo sessions: Thursdays 14:15 (lecture hall announced later)

Exam: Wednesday 19.10. 9-13 (K1, 215)

"=>" = exercise handed out
 "<=" = deadline for an exercise

There will be 1+5 rounds of exercises with tagged home assignments.