DYNAMICS										
1	Course Title:	DYNAM	CS							
2	Course Code:	INS2014								
3	Type of Course:	Compuls	sory							
4	Level of Course:	First Cyc	le							
5	Year of Study:	2								
6	Semester:	4								
7	ECTS Credits Allocated:	5.00								
8	Theoretical (hour/week):	3.00								
9	Practice (hour/week):	0.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	face							
14	Course Coordinator:	Doç. Dr.	M.ÖZGÜR YAYLI							
15	Course Lecturers:									
16	Contact information of the Course Coordinator:	bdeliktas@uludag.edu.tr 224 2900744 Uludağ Univ. Müh.Mim Fak. İnşaat Müh. Böl. Görükle, Bursa								
17	Website:	http://insaat.uludag.edu.tr								
18	Objective of the Course:	To present the student the concepts and applications of the motions of bodies using the principles established by Newton and Euler.								
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	Be able to describe orally and in writing the problems in dynamic and kinematics							
		2	Be able to model the fundamental principles of applied kinematics for particles and rigid bodies in engineering dynamics by using simple drawing techniques and modern computer technology.							
		3	Be able to implement an integrated understanding of engineering dynamics principles through applications involving problem solving and through creation of design solutions to engineering scenarios.							
		4	Be able to model the dynamics problems by using the simple drawing techniques and modern computer tools and also be able to drive the mathematical formulations of dynamics problems.							
		5	Be able to analyze the dynamics of particles and rigid bodies with applications.							
		6								
		7								
		8								
		9								
		10								
21	Course Content:									
	Course Content:									

Week	Theoretical								Practice									
1	Kinematics of Particles																	
2	Kinema	Kinematics of Particles																
3	Kinetics	inetics of Particles: Newton's Second Law																
4	Kinetics	inetics of Particles: Newton's Second Law																
5	Kinetics Method	s of Par s	rticles:	Ener	gy and	Mome	entum	1										
6	Kinetics Method	s of Pai s	rticles:	Ener	gy and	Mome	entum	1										
7	System	s of Pa	rticles															
8	System	s of Pa	rticles															
9	Kinema	tics of	Rigid I	Bodies	5													
10	Kinema	tics of	Rigid I	Bodies	5													
11	Plane N Acceler	lotion o ations	of Rigio	d Bod	ies: Fo	rces a	and											
12	Plane N Acceler	lotion o ations	of Rigio	d Bod	ies: Fo	rces a	and											
13	Plane N Momen	lotion o tum Me	of Rigio ethods	d Bod	ies: En	ergy a	and											
14	Plane N Momen	Plane Motion of Rigid Bodies: Energy and Momentum Methods																
22	Textbo	oks, Re	ferenc	es an	d/or O	ther		Ve	ctor M	echani	cs for E	ngineers–Dynamics, 8th SI Ed.,						
Activites						1	Number				Duration (hour)			Total Work Load (hour)				
Theore	Theoretical								gineer	ing me	cnanics	Hynamics, 5th 5t Hg., Menam J.						
Practica	als/Labs							(	0				0.00			0.00		
Self_stu	dy and	orepera	ation						14					56.00				
Homew	orks	<u>en</u>						6	6				4.00			24.00		
Project	S					R	2	2	2				12.00			24.00		
Field St	tudies							(	0				0.00			0.00		
Rititerm exams 2								10	10100				3.00			3.00		
Others								(	0			0.00			0.00			
Final Exams 1								50	50100			3.00			3.00			
Total Work Load															152.00			
Constributionat/Temm(Year) Learning Activities to								50	.00						5.07			
ECTS Credit of the Course														5.00				
Contribution of Final Exam to Success Grade								50	.00									
Total	Total								100.00									
Measurement and Evaluation Techniques Used in the Course																		
24	ECTS	/ WO	RK L	OAD	TAB	LE												
25	5 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME																	
			DO2		DOF	DOC	007				DO44	<b>B</b> O12	DO1	DO44	DO45	PO16		
	PQ		PQ3	r Q4	r Q 3	F Q0		<b>1</b> 20	FQ9	0	Full		3			r Q IO		
ÖK1	0	5	0	0	0	0	3	2	0	0	0	2	0	0	0	0		
ÖK2	5	3	0	4	0	4	3	0	0	0	0	0	0	0	0	0		

ÖK3	5	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	0	0	5	4	0	0	0	0	0	3	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	b 1 very low :		2 low		3 Medium		4 High		5 Very High							