PAF	RTIAL DIFFERENTIAL	EQUA	ATIONS AND ENG. APPLICATIONS					
1	Course Title:	PARTIAL DIFFERENTIAL EQUATIONS AND ENG. APPLICATIONS						
2	Course Code:	MAK 5247						
3	Type of Course:	Optional						
4	Level of Course:	Second Cycle						
5	Year of Study:	1						
6	Semester:	1						
7	ECTS Credits Allocated:	7.50						
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 face						
14	Course Coordinator:	Prof. Dr. YAŞAR PALA						
15	Course Lecturers:	Prof.Dr. Yaşar PALA						
16	Contact information of the Course Coordinator:	Prof.Dr. Yaşar PALA mypala@uludag.edu.tr						
17	Website:							
18	Objective of the Course:	The objective of the lecture is to teach the general theory of classical mechanics and apply the results of this theory to the problems of rigid and non-rigid bodies and mechanical systems. It is also the goal of the lecture to set up the necessary solution strategy for the problems.						
19	Contribution of the Course to Professional Development:							
20	Learning Outcomes:							
		1	Presenting application areas and the general solution methods of partial differential equations as a common subject.					
		2	Giving the success of the using the knowledge of Mathematics, basic sciences and engineering.					
		3	Giving the success of defining, modelling and solving of the problems in mechanical engineering and other areas.					
		4	Inouculating a global point of view to the science with the engineering first.					
		5						
		6						
		7						
		8						
		9						
		10						
21	Course Content:	0-	purse Content:					
Week	Theoretical	<u> </u>	Practice					
1	Basic principles. First order partial di equations. Applications.	fferential	Taotioo					

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2	Classifi condition		or eq	uation	s and i	oouna	ary											
3	Ortono	mal Fu	inction	S.														
4	Applica	olications of Fourier method.																
5	Probler geomet	oblems including cylindrical and spherical ometry.					T											
6	problen																	
7	Continu	ntinuous eigenvalues and Fourier integrals					3											
8	Laplace	place transforms																
9	Repeat	peating courses and midterm exam						T										
10	Transfo	nsform methods for boundary value																
11	Green f	unction	ns and	gene	ralised	functi	ons.											
12	Numeri	cal Met	thods															
13	Numeri	cal Met	hods															
14	Genera	l evalu	ation															
22		Textbooks, References and/or Other Materials:						2 K	1-Prof.Dr. Yaşar PALA , Modern Uygulamalı Diferensiyel Denklemler (Turkish), Nobel Yayıncılık, 2006. 2-Prof.Dr. Yaşar PALA , Fizikçiler ve Mühendisler için Kısmi Diferensiyel Denklemler (Turkish), U.Ü.Yayınları, 1996.									
Activites						_	Number				Dura	Duration (hour)			Total Work Load (hour)			
Midtore	ng €ayam					1		3	35140				3.00	3.00			42.00	
Practical	als/Labs					-			0			0.00	0.00			0.00		
5emen	PREVER 1							1	15,40				6.00	6.00			84.00	
Homew	vorks								1			25.00			25.00			
PPbβe ct								1	100.00			0.00	0.00			0.00		
	ld Studies							_	0			0.00			0.00			
Midtern	erm exams								35.00 35.				35.00					
Others									0			0.00			0.00			
FATAL E	xams							1	1 0 p.00			45.00			45.00			
	Vork Loa															231.00		
Total w	ork load	/ 30 hr	DKI		TAD											7.70		
ECTS	Credit of	the Co	urse													7.50		
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																	
	PQ	1 PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ	8 F	PQ9	PQ1 0	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16	
ÖK1	3	0	0	0	5	0	0	0	C)	0	0	0	0	0	0	0	
ÖK2	0	4	0	0	0	0	0	0	()	0	0	0	0	0	0	0	
ÖK3	0	5	0	0	5	0	0	0	1)	0	0	0	0	0	0	0	
ÖK4	4	0	0	0	0	0	0	0	C)	0	0	0	0	0	0	0	
			LO: L	_earr	ning C	bjec	tives	<u> </u>	PC	Q: P	rogra	m Qu	alifica	tions	<u>'</u>		-	

Contrib	1 very low	2 low	3 Medium	4 High	5 Very High
ution					
Level:					