	DIGITAL SIGNAL	- PRO	CESSING APPLICATIONS						
1	Course Title:	DIGITAL	SIGNAL PROCESSING APPLICATIONS						
2	Course Code:	EEM4434							
3	Type of Course:	Optional							
4	Level of Course:	First Cycle							
5	Year of Study:	4							
6	Semester:	8							
7	ECTS Credits Allocated:	4.00							
8	Theoretical (hour/week):	2.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	2							
11	Prerequisites:								
12	Language:	Turkish							
13	Mode of Delivery:	Face to face							
14	Course Coordinator:	Doç. Dr. ERSEN YILMAZ							
15	Course Lecturers:	Prof. Dr. Erdoğan Dilaveroğlu							
16	Contact information of the Course Coordinator:	Doç. Dr. Ersen Yılmaz E-mail:ersen@uludag.edu.tr Phone: (224) 294 2032 Address: Elektronik Mühendisliği Bölümü 4. Kat, No:431							
17	Website:								
18	Objective of the Course:	Using the fundamental tools and techniques of digital signal processing, to realize the solutions of important problems in the Matlab and to enable students to use Matlab efficiently as a tool.							
19	Contribution of the Course to Professional Development:	To be able to follow innovations and apply them in the field by using the competence of collecting information, researching and analyzing them.							
20	Learning Outcomes:								
		1	To be able to model and solve digital signal processing problems using toerical and practical knowledge						
		2	Gain the ability to design and conduct complex experiments and to collect, analyze and interpret data for digital signal processing engineering problems						
		3	Attain the ability to design partly or fully for a complex digital signal processing system, process meeting specific requirements under realistic constraints and conditions.						
		4	To be able to develop, select, and use modern techniques and tools efficiently using information technologies for digital signal processing applications						
		5	Gain the ability to identify, model, and solve complex engineering problems to select and apply appropriate analysis and modelling methods for digital signal processing problems.						
		6							
		7							
		8							
		9							
		10							
21	Course Content:								

	Course Content:										
Week	Theoretical		Р	ractice							
1	Discrete-Time Signals in the Time-I	Domain	D	Discrete-Time Signals in the Time-Domain (Applications)							
2	Discrete-Time Systems in the Time	-Domain	D	Discrete-Time Systems in the Time-Domain (Applications)							
3	Discrete-Time Signals in the Freque	ency-		Discrete-Time Signals in the Frequency-Domain (Applications)							
4	Linear Time Invariant Discrete-Time in the Frequency-Domain	e Signals		Linear Time Invariant Discrete-Time Signals in the Frequency-Domain (Applications)							
5	Digital Processing of Continuous-Ti Signals	ime		Digital Processing of Continuous-Time Signals (Applications)							
6	Digital Filter Structures: FIR		D	igital Filter Structures	: FIR (Applications)						
7	Digital Filter Structures: IIR		D	igital Filter Structures	: IIR (Applications)						
8	Digital Filter Design : FIR		D	igital Filter Design : F	IR (Applications)						
9	Digital Filter Design : IIR		D	igital Filter Design : II	R (Applications)						
10	Tunable Digital Filters		Т	unable Digital Filters	(Applications)						
11	Tunable Digital Filters		Т	unable Digital Filters	(Applications)						
12	Multirate Digital Signal Processing		M	lultirate Digital Signal	Processing (Applica	tions)					
13	Multirate Digital Signal Processing		Μ	lultirate Digital Signal	Processing (Applica	tions)					
14	Review		R	eview (Applications)							
Textbooks, References and/or Other Materials: Activites				1. S.K. Mitra, Digital Signal Processing Laboratory using Matlab, McG Hill, 2000. Number Duration (hour) Total Work Load (hour)							
Theore	rical			14	2.00	28.00					
Practic	las/Labs			14	2.00	28.00					
I E I VIVI I	udy and preperation	R	Т.	14	1.00	14.00					
Homev	, , , , , , , , , , , , , , , , , , ,		<u> </u>	0	0.00	0.00					
Quoixect		О	Τo	0 0	0.00	0.00					
Field S				0	0.00	0.00					
	naemams	1	6	000	18.00	18.00					
Others				0	0.00	0.00					
	xঞ্চা জs of Term (Year) Learning Activi	ties to	4	0100	32.00	32.00					
_	Vork Load					138.00					
Foratrik	อยู่มีคุณสมาร์เกลโครงam to Success Gra	de	6	0.00		4.00					
ECTS	Credit of the Course					4.00					
Course			th	Measurement and evaluation is carried out according to the priciples of Bursa Uludag University Associate and Undergraduate Education Regulation.							
24	ECTS / WORK LOAD TABLE	E									
25	CONTRIBUTION			NING OUTCOME	S TO PROGRAM	1ME					

QUALIFICATIONS PQ1 PQ2 PQ3 PQ4 PQ5 PQ6 PQ7 PQ8 PQ9 PQ1 PQ11 PQ12 PQ1 PQ14 PQ15 PQ16 ÖK1 ÖK2

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