MICROWAVE ELECTRONICS									
1	Course Title:	MICROV	VAVE ELECTRONICS						
2	Course Code:	EEM4216							
3	Type of Course:	Optional							
4	Level of Course:	First Cyc	sle						
5	Year of Study:	4							
6	Semester:	8							
7	ECTS Credits Allocated:	4.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:	No							
12	Language:	Turkish							
13	Mode of Delivery:	Face to t	face						
14	Course Coordinator:	Doç. Dr.	SİBEL YENİKAYA						
15	Course Lecturers:	-							
16	Contact information of the Course Coordinator:	Dr.Öğr. Üyesi Sibel YENİKAYA sguler@uludag.edu.tr Tel: (224) 294 2031 Adres: Elektronik Mühendisliği Bölümü 3. Kat, No:309							
17	Website:								
18	Objective of the Course:	To improve design, analysis and evaluation ability in microwave frequencies.							
19	Contribution of the Course to Professional Development:	Provides the ability to reach and interpret information about the field of study.							
20	Learning Outcomes:								
		1	Gain the ability to model and solve microwave elements and systems using theoretical and practical knowledge.						
		2	Gain the ability to identify, model, and solve the problems of active microwave circuits of impedance matching and microwave amplifiers; the ability to select and apply appropriate analysis and modeling methods for these problems.						
		3	Gain the ability to design partly or fully a microwave circuit meeting specific requirements, ability to apply modern design methods in this context.						
		4	The ability to use information technologies in an efficient way to design active microwave circuits.						
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
		Co	ourse Content:						
	Theoretical		Practice						
1	introduction to microwave systems								

2	Tran	nsmis	sion I	ine the	eory												
3	Micr	licrostrip lines															
4	Micr	crowave Circuit Analysis															
5	Sign	al flo	w gra	phs													
6	Impe	pedance matching circuits.															
7	Tran	ansistors at high frequencies															
8	gain	Design amplifiers with s-parameters, amplifier gain, stability and input, output impedance matching of amplifiers.						er									
9	Revi	Review of Past Lecturers															
10	Nois	loise in microwave amplifiers.															
11	Wide	/ideband microwave amplifiers.															
12	Micr	licrowave osilators															
13	Micr	Aicrowave Project presentations															
14	Micr	Microwave Project presentations															
22	Textbooks, References and/or Other Materials:							2r 2. U 3.	 Microwave Transistor Amplifiers : Analysis and Design, 2nd Ed., G. Gonzalez, Prentice-Hall, 1997. RF/Microwave Circuit Design for Wireless Application, U.L. Rohde and D.P. Newkirk, Wiley, 2000. Microwave Engineering, 2nd Ed., D.M. Pozar, John Wiley, 2001 								
Activites							Number			Dura	Duration (hour)			Total Work Load (hour)			
Theore	heoretical							20,00			3.00	3 00			42 00		
Practica	racticals/Labs							0			0.00	0.00			0.00		
	alf study and preperation								20.00			0.00	0.00			0.00	
	lomeworks								0			0.00	0.00			0.00	
Project	rojects								10.00			0.00	0.00			0.00	
Field St	eld Studies								0			0.00	0.00			0.00	
Midtern	fidterm exams							6	60,00			36.00	36.00			36.00	
Others	ers								0			0.00	0.00			0.00	
Final E	Exams							1				36.00	36.00			36.00	
Total W	tal Work Load						-								114.00		
	al work load/ 30 hr						E	Education Regulation.						3.80			
ECTS (Credi	t of t	he Co	urse												4.00	
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																
	I	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ	B PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	ł	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	(0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
	LO: Learning Objectives PQ: Program Qualifications																

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