		ND AL	JGMENTED REALITY						
1	Course Title:	VIRTUA	L AND AUGMENTED REALITY						
2	Course Code:	BM6026							
3	Type of Course:	Optional							
4	Level of Course:	Third Cycle							
5	Year of Study:	1							
6	Semester:	2							
7	ECTS Credits Allocated:	6.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:								
12	Language:	Turkish							
13	Mode of Delivery:	Face to f	face						
14	Course Coordinator:	Doç. Dr.	Metin BİLGİN						
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	Bilgisayar Müh. Bölüm Binası, 1. kat, oda 109 Tel.:+90 (224) 275 52 63 email: metinbilgin at uludag.edu.tr							
17	Website:								
18	Objective of the Course:	The objective of the course is to establish and cultivate a broad and comprehensive understanding of this rapidly evolving and commercially viable field of Computer Science and prepare the student for participating in the production of highly integrative immersive applications, immersive social platforms, cross disciplinary academic research projects and leading developments in Medical, Industrial and Manufacturing R&D.							
19	Contribution of the Course to Professional Development:	Engineering Science: 85%; Engineering Design: 15%							
20	Learning Outcomes:								
		1	Demonstrate understanding and perspective on the VR/AR landscape; past, present and future						
		2	Demonstrate understanding of fundamental computer vision, computer graphics and human-computer interaction techniques related to VR/AR						
		3	Demonstrate insights to key application areas for VR/AR						
		4	Demonstrate the ability to design and implement VR/AR experiences						
		5							
		6							
		7							
		8							
		9							
		10							

21	Course Content:																
		Course Content:															
Week	Theor	etical						Pr	actice								
1	Introdu	ction to	o Imme	ersive	Techno	ologie	S										
2	Virtual	irtual Reality															
3	Augme	ented R	eality														
4	Motion control		ig, nav	igatio	n and												
5	The pr	esent a	nd the	future	e of xR												
6	The Hu	he Human behind the lenses															
7	Modeli	Aodeling the Physical world															
8	Camer	amera tracking and 3D Rendering for															
9	Preser	ce, Ag	ency a	nd Int	eractiv	ity		T									
10	Sound	in Imm	ersive	Envir	onmen	ts											
11	Medica	l Appli	cations	;													
12	VR Ap	olicatio	ns in N	lanufa	acturing	3											
13	Advan	ced Top	oics in	VR													
14	Advan	ced Top	oics in	AR													
	Theoretical P									2017 <u>3.00</u> 0.00				42.00			
									C						0.00		
Self Stu	-	ptepel	ation			F			FIGHT			1.00			14.00		
	eworks									3			30.00			90.00	
Broject										. <del>0</del> 0			0.00			0.00	
	Studies														0.00		
	n exams 1 6											0.00			0.00		
Others															30.00		
Contrib	/ution of √ork Loa		(Year)	Learn	ing Ac	tivities	to	40	1 <u>.00</u>			30.00		176.00			
			Evam t		CASS (	irado		60	60.00						5.87		
	hter fight									6.00							
Measu	rement			n Tec	hnique	s Use	d in th	ne 3 f	Project	/Home	work (%	640) an	d 1 Fir		m (%60)		
Course 24	ECTS	./ WO	RKI	ΟΑΓ	) TAB	LE											
<del>_</del> 25							<b>515</b>					S TO I			ME		
20			CON									5 10 1	RU	JNAIVI			
	PG	1 PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16	
ÖK1	2	2	3	4	5	5	0	0	0	0	0	0	0	0	0	0	
ÖK2	2	2	3	3	4	4	0	0	0	0	0	0	0	0	0	0	
ÖK3	2	2	3	3	5	5	0	0	0	0	0	0	0	0	0	0	
									1								

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