	WIR	ELES	S NETWORKS								
1	Course Title:	WIRELE	SS NETWORKS								
2	Course Code:	EEM4412									
3	Type of Course:	Optional									
4	Level of Course:	First Cyc									
5	Year of Study:	4									
6	Semester:	8									
7	ECTS Credits Allocated:	4.00	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	face								
14	Course Coordinator:	Doç. Dr.	Doç. Dr. SAİT ESER KARLIK								
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	E-posta:kocyigit@uludag.edu.tr Tel: (224) 294 1908 Adres: Mühendislik-Mimarlık Fakültesi, Elektronik Mühendisliği Bölümü, 5. Kat, Oda No:510, 16059 Nilüfer/BURSA									
17	Website:										
18	Objective of the Course:	To analyse the wireless networks principles, standards and various network structures, and to introduce undergraduate students to wireless network design, installation and management techniques; thanks to this, to provide them to be able to analyse modern wireless networks and to support that they could be raised the expedient wireless network design and installation.									
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19	Contribution of the Course to Professional Development:	expedier									
19			nt wireless network design and installation.								
	Professional Development:	expedier 1									
	Professional Development:		will be able to model and solve wireless network problems								
	Professional Development:	1	will be able to model and solve wireless network problems theoretical and practical knowledge. will be able to identify, model, and solve wireless networks problems; will be able to select and apply appropriate analysis and modelling methods for wireless networks								
	Professional Development:	1 2	will be able to model and solve wireless network problems theoretical and practical knowledge. will be able to identify, model, and solve wireless networks problems; will be able to select and apply appropriate analysis and modelling methods for wireless networks problems. will be able to design partly or fully wireless network specific requirements under realistic constraints and								
	Professional Development:	1 2 3	will be able to model and solve wireless network problems theoretical and practical knowledge. will be able to identify, model, and solve wireless networks problems; will be able to select and apply appropriate analysis and modelling methods for wireless networks problems. will be able to design partly or fully wireless network specific requirements under realistic constraints and conditions. will be able to develop, select, and use modern techniques and tools necessary for wireless networks applications; will								
	Professional Development:	1 2 3	will be able to model and solve wireless network problems theoretical and practical knowledge. will be able to identify, model, and solve wireless networks problems; will be able to select and apply appropriate analysis and modelling methods for wireless networks problems. will be able to design partly or fully wireless network specific requirements under realistic constraints and conditions. will be able to develop, select, and use modern techniques and tools necessary for wireless networks applications; will be able to use information technologies in an efficient way. will be able to design and conduct wireless networks experiments and will be able to collect, analyze and								
	Professional Development:	1 2 3 4 5 6 7	will be able to model and solve wireless network problems theoretical and practical knowledge. will be able to identify, model, and solve wireless networks problems; will be able to select and apply appropriate analysis and modelling methods for wireless networks problems. will be able to design partly or fully wireless network specific requirements under realistic constraints and conditions. will be able to develop, select, and use modern techniques and tools necessary for wireless networks applications; will be able to use information technologies in an efficient way. will be able to design and conduct wireless networks experiments and will be able to collect, analyze and interpret data for wireless networks problems.								
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Course Content: Course Content:			10									
Theoretical	21	Course Content:										
1 Introduction to wireless networks, principles and fundamentals of wireless communication. 2 Wireless communication characteristics, channel models, attenuation and sample calculations. 3 Modulation and multiple access techniques in wireless communication: FDMA, TDMA, CDMA, CSMA, FHSS and DSSS. 4 GSM systems: frequency reusing, improving capacity and attenuation calculations. 5 GSM systems: frequency reusing, improving capacity and attenuation calculations. 6 Wireless Local Area Networks (WLAN): WLAN topologies, standards, operation mods and physical layer. 7 Medium Access Control (MAC) sublayer-HIPERLAN 2, wireless routing protocols and performance problems on wireless networks 8 Midtern Exam and Course Revise Activites Number Duration (hour) Total Work Load (hour) Titagnetic Wilmax: Wilmax physical layer. Wilmax MAC. 14 3.00 42.00 Practicals/Labs 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0			Co	uı	rse Content:							
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Measurem	ent ar	nd Eva	aluatio	n Ted	hnique	s Use	d in th	ne								
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24 EC	CTS /	WO	RK L	OAL	TAB	LE										
25		CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS														
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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	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
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Contrib ution Level:	1 very low 2 low				3 Medium			4 High			5 Very High					