SIGNALING AND SWITCHING SYSTEMS										
1	Course Title:	SIGNAL	ING AND SWITCHING SYSTEMS							
2	Course Code:	EEM4405								
3	Type of Course:	Optional								
4	Level of Course:	First Cycle								
5	Year of Study:	4								
6	Semester:	7								
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:	-								
12	Language:	Turkish								
13	Mode of Delivery:	Face to face								
14	Course Coordinator:	Doç. Dr. SAİT ESER KARLIK								
15	Course Lecturers:	-								
16	Contact information of the Course Coordinator:	E-posta:ekarlik@uludag.edu.tr Tel: (224) 294 20 95								
17	Website:									
18	Objective of the Course:	To gain sufficient background about basic devices and architectures used in current signalling and switching systems; to determine and solve problems in signalling and switching systems by using related standards and protocols; to select proper signalling and switching methods for system applications.								
19	Contribution of the Course to Professional Development:	Having the required knowledge depth about topics in signaling and switching systems								
20	Learning Outcomes:									
		1	To gain sufficient background about basic devices and architectures used in current signalling and switching systems							
		2	To determine problems in signalling and switching systems							
		3	To solve problems in signalling and switching systems							
		4	To design signalling and switching systems that can meet specific requirements under realistic limitations and conditions							
		5	To select proper signalling and switching methods for system applications							
		6								
		7								
		8								
		9								
		10								
21	Course Content:									
	Course Content:									
Week	Theoretical Practice									

1	Introduction to signalling systems, sig in telephony networks, classification	gnalling of						
2	In-band signalling, out-band signallin	g,						
3	Signalling system no.5, MFC-R2 sign Signalling in access networks: GR-30 standards, V5 standards, introductior common channel signalling	alling)3 n to						
4	Common channel signalling: Signallir system no.6 and no.7 standards, sigr units, signalling lines and signalling n MTP1, MTP2, MTP3 and TUP signal	ng nalling etworks, ling						
5	Digital Subscriber Signalling System (DSS1): Call control signalling, ISUP signalling, end-to-end signalling	No.1						
6	Introduction to switching systems, requirement for switching methods, classification of switching systems: ci switching systems, switching systems memories	rcuit s with						
7	Circuit switching methods: space, tim frequency domain switching; messag switching technique, packet switching techniques: datagram mode, virtual o mode	ie, ie J ircuit						
8	Circuit switching methods: space, tim frequency domain switching; messag	10, 10 1						
Activit	es		Number	Duration (hour)	Total Work Load (hour)			
Theore	torganizations, nierarchical structure (lical Itelephony network, telephony exchar	or a nge	14	3.00	42.00			
Practic	als/Labs		0	0.00	0.00			
Self stu	dy and preperation	vato	14	2.00	28.00			
Homew	vorks		0	0.00	0.00			
Project	PBX, leased exchanges, enterprise r	etwork	0	0.00	0.00			
Field S	tudies		0	0.00	0.00			
Midterr	mextaiplexing : TDM, STM and ATM		1	20.00	20.00			
Others			0	0.00	0.00			
Final E	Witches and add/drop multiplexers,	all-	1	30.00	30.00			
Total V	Vork Load				120.00			
Total w	Swilennig aroundetares, option				4.00			
ECTS	Credit of the Course				4.00			
	techniques and architectures	ng						
14	Cellular and VoIP signalling and swite systems	ching						
22	Textbooks, References and/or Other Materials:		 Signalling in Telecommunication Networks, John G. Van Bosse and Fabrizio U Devetak, Wiley Series. Telecommunications Switching, J. Gordon Pearce, Springer. Signaling System # 7, Travis Russell, McGraw-Hill. Optical Switching, G. I. Papadimitrou, C.Papazoglou, A. S. Pomportsis, Wiley Series. 					
23	Assesment							
TERML	EARNING ACTIVITIES	NUMBE	WEIGHT					
Midterr	n Fxam	R 1	40.00					
Imater		1'	10.00					

Quiz						0)	0.0	0.00							
Home work-project 0								0.0	0.00							
Final Exam 1							60.	60.00								
Total 2								100	100.00							
Contribution of Term (Year) Learning Activities to Success Grade								40.	40.00							
Contribution of Final Exam to Success Grade							60.	60.00								
Total							10	100.00								
Measurement and Evaluation Techniques Used in the Course						ne Mio	Midterm and final exams									
24 EC	24 ECTS / WORK LOAD TABLE															
25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	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	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 v ution Level:		/ery	ow	2 low			3 Medium		4 High			5 Very High				