		CRYP	TOLOGY							
1	Course Title:	CRYPTC	DLOGY							
2	Course Code:	BLPS260)							
3	Type of Course:	Optional								
4	Level of Course:	Short Cy	cle							
5	Year of Study:	2								
6	Semester:	4								
7	ECTS Credits Allocated:	3.00								
8	Theoretical (hour/week):	2.00								
9	Practice (hour/week):	0.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Öğr. Gör	. Dr. ABDURRAHMAN DAYIOĞLU							
15	Course Lecturers:									
16	Contact information of the Course Coordinator:	dayioglu@uludag.edu.tr								
17	Website:									
18	Objective of the Course:	To gain basic concept knowledge in the field of cryptography.								
19	Contribution of the Course to Professional Development:	By providing the student with basic concept knowledge in the field of cryptography, the infrastructure will be ready in various situations that (s)he may encounter in (her)his professional life.								
20	Learning Outcomes:									
		1	Defines basic cryptography concepts.							
		2	Explain the basic mathematical concepts of cryptography.							
		3	Gain theoretical and practical knowledge and experience about encryption algorithms.							
		4	List the basic principles of public-key cryptographic systems.							
		5	Understands the role that cryptography plays in overall security.							
		6	Gain the ability to use best practice encryption schemes from what they have learned for various real-world scenarios.							
		7	Suggest new encryption and cryptography methods using knowledge of Mathematics and Computer science.							
		8	Can apply encryption and cryptography methods in different security systems.							
		9	Uses primality tests, applies factorization methods and defines basic cryptanalysis methods.							
		10								
21	Course Content:									
		Co	urse Content:							
Week	Theoretical		Practice							
1	Presentation of the course.									
2	Basic objectives of cryptography, Int to classical cryptography systems.	roduction								

3	Detailed systems	l overv 8.	view of	class	ical cry	ptogra	aphy														
4	Introduc	tion to	basic	numb	er theo	ory.															
5	Block ci number	phers s and p	with ar polyno	rithme mials.	tic ope	ration	s on														
6	Flowing number	cipher s and p	rs with polyno	arithr mials.	netic o	peratio	ons or	۱													
7	Introduc	tion to	Public	c-Key	Crypto	syste	ms.														
8	Public-	Key Cry	yptosy	stems	i.																
9	Discrete	e logari	ithm pi	roblen	n																
10	Diffie-H	ellman	Key E	xchai	nge																
11	DSA, A	-Gama	al																		
12	RSA																				
13	Primalit	y tests																			
14	Factorin method	ig metł s	hods a	ind cry	/ptanal	ysis															
22	Textboo Materia	Textbooks, References and/or Other Materials:									Stinson, Douglas R. Cryptography: theory and practice. CRC press, 2005.										
										Nigel Smart, Cryptography: An Introduction, Mcgraw-Hill Publication, 2004											
										Stalling	s, and '	William	illiam Stallings. Cryptography a								
Activites									Numb	ber		Dura	Duration (hour)			Total Work Load (hour)					
Theore	tical							K	iptoloji	ye Giri:	s Ders I	∿ ସ ାଛନ,	Uygula	amalı N	Aten atik						
Practicals/Labs									0				0.00			0.00					
Selt	dy and	repera	ation					-	14						28.00						
Homew	vorks	0.11							14						28.00						
Project	S					R			0						0.00						
Field S	tudies					<u> </u>			0						0.00						
Midtern	n exams					0		0.0	loido						3.00						
Others									0				0.00			0.00					
FINALE	FINAI EXAMs 1									60 ₁ 00					3.00						
Total W	/ork Loa	d													90.00						
Contrib Succes	Contribution of learning Activities to									40.00					3.00						
	Credit of	the Co	ourse xam u	0 3 00	cess G	raue		-00	.00						3.00						
Total								10	0.00												
Measur Course	rement a	nd Eva	aluatio	n Tec	hnique	s Use	d in th	ne Re	elative	evalua	tion.										
24	ECTS	/ WO	RK L	OAD	ТАВ	LE		•													
25			CON	TRIE	BUTIO	N OI	F LE	ARN QUA	ling Lific	OUTC ATIO	COMES	S TO I	PROC	GRAM	ME						
	PQ	I PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16					
ÖK1	2	4	2	5	3	3	3	2	2	2	2	0	0	0	0	0					
ÖK2	2	4	2	5	3	3	3	2	2	2	2	0	0	0	0	0					
			1	I	I	I	I	I	1	I			I	I	1						

ÖK3	2	4	2	5	3	3	3	2	2	2	2	0	0	0	0	0
ÖK4	4	5	2	4	5	4	2	3	3	3	3	0	0	0	0	0
ÖK5	2	4	2	5	3	3	3	2	2	2	2	0	0	0	0	0
ÖK6	2	4	2	5	3	3	3	2	2	2	2	0	0	0	0	0
ÖK7	4	5	2	4	5	4	2	3	3	3	3	0	0	0	0	0
ÖK8	4	5	2	4	5	4	2	3	3	3	3	0	0	0	0	0
ÖK9	4	5	2	4	5	4	2	3	3	3	3	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	Contrib 1 very low ution Level:			2 low			3 Medium			4 High			5 Very High			