MATRIX THEORY									
1	Course Title:	MATRIX	THEORY						
2	Course Code:	MAT201	8						
3	Type of Course:	Optional							
4	Level of Course:	First Cyc	le						
5	Year of Study:	2							
6	Semester:	4							
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 f	ace						
14	Course Coordinator:	Dr. Ögr. Üyesi SETENAY DOĞAN							
15	Course Lecturers:	Yrd.Doç.	Dr.Nisa Çelik						
16	Contact information of the Course Coordinator:	setenay 0224 294 U.Ü. Fer	®uludag.edu.tr 41763 n Edebiyat Fakültesi Matematik Bölümü Nilüfer BURSA						
17	Website:								
18	Objective of the Course:	The aim of the course is to introduce the matrix and some special types of matrix, computing the matrix expansions finding the inverse matrix defining some special matrices LU decompozition method to find the inverse of matrix. Cryptography and applications							
19	Contribution of the Course to Professional Development:								
20	Learning Outcomes:								
		1	Knows the definition of the matrix and some special types of matrices.						
		2	Knows determinant and transpose matrix calculation.						
		3	Knows the cyrptology.						
		4	Knows that the upper and lower triangular matrix and calculating the definition.						
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
		Co	burse Content:						
Week	I heoretical		Practice						
1	Inatrix definition and basic properties	S							
2	Coloulation of transports matrix	method							
3									
4	Calculation of inverse matrix								

5	Som appli	Some special types of matrix and applications.																
6	LU d	LU decompozition																
7	Obta decc	Obtain the inverse matrix with LU decompozition																
8	Solu deco	Solution of linear system of equations with LU							ſ									
9	LLT of ec	LT decomposition and solutions of systems of equations																
10	Midte	dterm exam and general review																
11	Chol of ec	Cholesky method and solutions of of systems of equations							6									
12	Cryp	Sryptology																
13	Caes	Caesars cryptology method																
14	Hill C	Hill Cryptology method and applications																
22	Text Mate	Textbooks, References and/or Other Materials:						Т	Theory of matrices. Sam Perlis									
23	Asse	esme	ent															
TERM L	LEARI	EARNING ACTIVITIES					N	WEIGHT										
Midtern	Vidterm Exam 1						4	40.00										
Quiz							(	)	0									
Activites						Numb	Dura	Duration (hour)			Load (hour)							
TAtedre	etical						2	2	1	10ρμ00			3.00	3.00			42.00	
Practicals/Labs							0.00				0.00							
Self study and preperation								0			0.00			0.00				
Homeworks								0			0.00			0.00				
Project	Projects								1	100.00			0.00	0.00			0.00	
Field S	Field Studies									0			0.00			0.00		
Midtern 24		ims rs /	WO	PKI		TAR	IF			1			10.00	10.00			10.00	
Others	Ithers								14			4.00	4.00			56.00		
Final E	Exams								1			12.00			12.00			
Total W	Vork L	_oad															120.00	
Total w	Total work load/ 30 hr															4.00		
ECTS Credit of the Course								4.00										
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																	
	F	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ	8 PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16	
ÖK1	(	C	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	
ÖK2	(	C	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
ÖK3	3	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
ÖK4	(	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	LO: Learning Objectives PQ: Program Qualifications										rogra	ım Qu	alifica	tions	i	1	<u>.</u>	

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