	DATA VISUALIZATION											
1	Course Title:	DATA VI	ISUALIZATION									
2	Course Code:	EKO511	9									
3	Type of Course:	Optional										
4	Level of Course:	Second	Cycle									
5	Year of Study:	1										
6	Semester:	1										
7	ECTS Credits Allocated:	4.00										
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:	Prof. Dr.	ZEHRA BERNA AYDIN									
15	Course Lecturers:											
16	Contact information of the Course Coordinator:	e-mail:be Tel: 224 Adres: U Ekonome	erna@uludag.edu.tr 2941119 Iudağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, etri Bölümü,16059, Görükle/Bursa									
17	Website:											
18	Objective of the Course:	It will be understa	ensured that complex data are presented in a visually andable way so that they can be easily perceived.									
19	Contribution of the Course to Professional Development:	Ability to	perceive and interpret complex data.									
20	Learning Outcomes:											
		1	The importance of data visualization will be explained.									
		2	Data visualization concepts will be introduced.									
		3	Visualization tools that can work effectively in multidimensional and very large databases will be introduced.									
		4	Information about the types of networks, their resistance and how they propagate information will be given.									
		5	It will be explained how the graphics should be interpreted.									
		6										
		7										
		8										
		9										
		10										
21	Course Content:											
		Co	ourse Content:									
Week	Theoretical		Practice									
1	Data Visualization definition and con framework	ceptual										
2	Visual Perception, Color Selection a Design Principles	nd										
3	Data Visualization Software											

4	Data	a Visu	Jaliza	tion So	oftwar	e													
5	Data	a Acq	luisitic	on and	data	parsinę	9												
6	Mult	ivaria	ate Dr	awing	and C	Graphir	ng												
7	Data	a visu	ualizat	ion wi	th Exc	cel and	SPSS	S											
8	Data	a visu	ualizat	ion wi	th R														
9	Data	a visu	ualizat	ion wi	th R														
10	Data	a visu	ualizat	ion wi	th Pyt	hon													
11	Data	a visu	ualizat	ion wi	th Pyt	hon													
12	Intro	oducti	ion of	the Ta	ableau	u progra	am												
13	Data App	a Visu licatio	ualiza ons - 7	tion in 1	Busir	ness Int	tellige	nce											
14	Data App	a Visu licatio	ualiza <sup>.</sup> ons - 2	tion in 2	Busir	ness Int	tellige	nce											
22 Activit	Textbooks, References and/or Other Materials:									-Simon, P. (2014), "The visual organization: data visualization", Big Data, and the quest for better decisions. John Wiley & Sons. -Tugay Bilgin, T., Yılmaz Çamurcu, A. (2008), Multidimensional Data Visualization , Çanakkale Onsekiz Mart universty, Çanakkale. Visualizing Data, Ben Fry, O'reilly Sosyal Ağ Analizi, Necmi Gürsakal, Dora Ware, C. (2010). Visual thinking: For design. Morgan Kaufmann. Camões. J. (2016). Data at Work: Best practices for Number Duration (hour) Total Work Load (hour)									
TEBMe	at Frank	NING	ACTI	VITIES	;		N	IUMBE	=  W	<b>ŦI</b> GHT			2.00	2.00 28.00					
Practic	Practicals/Labs										0				0.00				
Self_stu	Self study and preparation									0.04				3.00			42.00		
Homew	lomeworks									4				5.00			20.00		
Project	rojecis									100.00				0.00			0.00		
Field S	a Exam 11									0				0.00			0.00		
Midterr	hdterm exams												10.00	10.00			10.00		
Others	thers									0			0.00			0.00			
Eionatra	Marte Karols of Final Exam to Success Grade										100.00			20.00			20.00		
Total V	Fotal Work Load														120.00				
Total w	Total work load/ 30 hr										Enal exam and applicat				on of theoretical knowledge in				
ECTS Credit of the Course														4.00					
24	EC	TS /	WO	RK L	OAD	TAB	LE												
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	4	4	3	4	3	3	4	3	3	3	2	0	0	0	0		
ÖK2		4	4	3	2	3	4	3	3	4	4	3	4	0	0	0	0		
ÖK3	;	3	3	3	4	3	4	4	2	3	3	3	3	0	0	0	0		
ÖK4		4	4	3	3	2	3	4	3	3	2	3	3	0	0	0	0		

ÖK5	3	5	4	4	3	4	3	2	4	3	3	4	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:				2 low			3 Medium			4 High			5 Very High			