		SIMU	JLATION							
1	Course Title:	SIMULA	TION							
2	Course Code:	EKO430	5							
3	Type of Course:	Compuls	sory							
4	Level of Course:	First Cyc	cle							
5	Year of Study:	4								
6	Semester:	7								
7	ECTS Credits Allocated:	5.00								
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	face							
14	Course Coordinator:	Doç. Dr.	ARZU EREN ŞENARAS							
15	Course Lecturers:	Doç.Dr.\	/.Sinem Arıkan Kargı							
16	Contact information of the Course Coordinator:	arzueren@uludag.edu.tr Uludağ University Faculty of Economics and Administrative Sciences A Block 16059 Nilüfer/Bursa								
17	Website:									
18	Objective of the Course:	To explain various simulation solution models and to enable them to apply simulation models.								
19	Contribution of the Course to Professional Development:		simulation programs, it becomes easier to solve, analyze gn the system problem.							
20	Learning Outcomes:									
		1	To be able to apply the basic principles of simulation studies.							
		2	To be able to establish and interpret simulation models for different systems							
		3	To be able to apply Monte Carlo Simulation in MS Excel							
		4	To be able to develop a simulation model with Micro Saint Sharp							
		5	To be able to create activity cycle diagrams							
		6	To be able to apply simulations by hand							
		7								
		8								
		9								
		10								
21	Course Content:									
1.07		Co	ourse Content:							
	Theoretical	- 1- P	Practice							
1	Basic Concepts of Simulation and M Simulation Definition, Advantages ar Disadvantages of Simulation, Applica Areas, System and System Environm System Elements, Discrete and Con Systems	nd ation nent,								

•	Concept of Madel Classification of	f Madala			
2	Concept of Model, Classification of Classification of Simulation Models Continuous and Batch Simulation C Steps of Simulation Study	,			
3	Fundamentals of Simulation in MS	Excel and			
	Monte Carlo Simulation: Fundamer	ntals of			
	Simulation in MS Excel, Structure of Simulation Sheet in MS Excel, Mon				
	Simulation	ile Cario			
4	Discrete Event Simulation				
5	Time Slicing, Next Event Technique	е			
6	Simulation model development with Saint Sharp Program	n Micro			
7	Example in MSS Program				
8	Activity Cycle Charts				
9	Three-Phase Approach				
10	Basics of Manual Simulation, Exammanual simulation	nple of			
11	Random sampling in discrete event simulation	t			
12	Random Number Generators				
13	Reversion, Rejection, Composition, Transformation, Warm-up period	,			
14	Model Validation and Validity, Black				
Δ	Validity. White Box Validity. Analys	is of	NI	D(' //) T. (-134/1
Activi	tes		Number	Duration (no	ur) Total Work Load (hour)
					, ,
Theore	Tivatoriaio.		114	3.00	, av lovi
Theore 23	7 tocoontone			3.00 0.00	42.00
Practic	cals/Labs	İR	0	0.00	42.00 0.00
Practic	cals/Labs udy and preperation	R	0 14	0.00 5.00	42.00 0.00 70.00
Practic Self stu	cals/Labs udy and preperation works	1.	0 14	0.00 5.00 2.00	42.00 0.00 70.00 28.00
Practic Self stu Homev	cals/Labs udy and preperation works	R	0 14 14 000	0.00 5.00 2.00 0.00	42.00 0.00 70.00 28.00 0.00
Practice Self stu Homev Profect Field S	works Studies	1.	0 14 14 000 0	0.00 5.00 2.00 0.00	70.00 28.00 0.00 0.00 0.00 0.00
Practice Self structure Homew Profect Field S	works Studies	1.	0 14 14 000 0 60100	0.00 5.00 2.00 0.00 0.00 5.00	70.00 28.00 0.00 28.00 0.00 5.00
Practice Self str Homev Profect Field S Middlefi	works Studies TARXams	0	0 14 14 0 00 0 60400 0	0.00 5.00 2.00 0.00	70.00 28.00 0.00 0.00 0.00 0.00
Practice Self structure Homeward Field S Middle Others	works Studies	0	0 14 14 000 0 60100	0.00 5.00 2.00 0.00 0.00 5.00	70.00 28.00 0.00 28.00 0.00 5.00
Practice Self stu Homew Profect Field S Middlefi Others Contrib	cals/Labs udy and preperation works ts Studies mexams suition of Term (Year) Learning Activities Strade Work Load	0 11	0 14 14 0 00 0 6 400 0	0.00 5.00 2.00 0.00 0.00 5.00 0.00	70.00 70.00 28.00 0.00 0.00 5.00 0.00
Practice Self stu Homew Profect Field S Middlefi Others Contrib	cals/Labs udy and preperation works ts Studies TAPEXAMS Suition of Term (Year) Learning Activities	0 11	0 14 14 0 00 0 60400 0	0.00 5.00 2.00 0.00 0.00 5.00 0.00	70.00 70.00 28.00 0.00 0.00 0.00 5.00 0.00 5.00
Practice Self stu Homev Profect Field S Middle Others Constrict Total V Total W	cals/Labs udy and preperation works ts Studies TARNAMS Section of Term (Year) Learning Activities Secti	0 1 1 ities to	0 14 14 10,00 0 60,00 0 40,00	0.00 5.00 2.00 0.00 0.00 5.00 0.00 5.00	42.00 0.00 70.00 28.00 0.00 0.00 5.00 0.00 5.00 150.00
Practice Self str Homev Profect Field S Midden Others Total V Total V ECTS Measu	cals/Labs udy and preperation works ts Studies TAPM Exams Sections of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Strade Work Load Soution of Term (Year) Learning Activities Soution of Term (Year) Learning Act	0 1 1 ities to	0 14 14 10,00 0 60,00 0 40,00	0.00 5.00 2.00 0.00 0.00 5.00 0.00 5.00	70.00 70.00 28.00 0.00 0.00 0.00 5.00 150.00 5.00
Practice Self stu Homew Profect Field S Middlef Others Total V Total V ECTS Measu Course	cals/Labs udy and preperation works ts Studies mexams suition of Term (Year) Learning Activities Grade Work Load Suition of Tilla Exam to Success Grade Vork Load Credit of the Course Irement and Evaluation Techniques to	11 Ities to	0 14 14 10,00 0 60,00 0 40,00	0.00 5.00 2.00 0.00 0.00 5.00 0.00 5.00	70.00 70.00 28.00 0.00 0.00 0.00 5.00 150.00 5.00
Practice Self str Homew Profect Field S Middlefi Others Total V Common Total W ECTS Measu Course 24	cals/Labs udy and preperation works ts Studies mexams suition of Term (Year) Learning Activities Grade Work Load outlor or mark Exam to Success Grade Vork load/ 30 hr Credit of the Course irement and Evaluation Techniques to a ECTS / WORK LOAD TABL	1 1 Used in the	0 14 14 0 00 0 6 400 0 4 400 e Homework, mid	0.00 5.00 2.00 0.00 0.00 5.00 0.00 5.00	7.00 0.00 70.00 28.00 0.00 0.00 5.00 0.00 5.00 150.00 5.00 5.00
Practice Self stu Homew Profect Field S Middlef Others Total V Total V ECTS Measu Course	cals/Labs udy and preperation works ts Studies mexams suition of Term (Year) Learning Activities Grade Work Load outlor or mark Exam to Success Grade Vork load/ 30 hr Credit of the Course irement and Evaluation Techniques to a ECTS / WORK LOAD TABL	Used in th	0 14 14 0 00 0 6 400 0 4 400 e Homework, mid	0.00 5.00 2.00 0.00 5.00 0.00 5.00 5.00	70.00 70.00 28.00 0.00 0.00 0.00 5.00 0.00 5.00 150.00 5.00 5.00

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	3	2	3	3	3	3	3	4	1	2	3	3	0	0	0	0
ÖK2	2	3	4	3	2	3	4	2	3	3	3	3	0	0	0	0
ÖK3	3	4	4	3	3	3	2	3	3	3	4	3	0	0	0	0

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