PRORAMMABLE LOGIC CONTROLLERS

1	Course Litle:	PRORAN	MMABLE LOGIC CONTROLLERS							
2	Course Code:									
3	Type of Course:	Optional								
4	Level of Course:	Short Cy	cle							
5	Year of Study:	2								
6	Semester:	4								
7	ECTS Credits Allocated:									
8	Theoretical (hour/week):									
9	Practice (hour/week):									
10	Laboratory (hour/week):									
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Öğr.Gör.	HASAN BAYAZIT							
15	Course Lecturers:	İsmet GÜ	ÜCÜYENER							
16	Contact information of the Course Coordinator:	İsmet GÜ TBMYO	ÜCÜYENER ismetguc@uludag.edu.tr, 02242942349, U.Ü. Mekatronik Prg. Bşk. Görükle Bursa							
17	Website:									
18	Objective of the Course:	In this co circuits b	burse, aimed to gain the competence of use in the control by learning the PLC hardware and software.							
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
	•	1	Being able to use the PLC module in the solution circuits							
		2	Being able to use the PLC programing editor							
		3	Being able to use the definition of Bit, Byte, Word and Double Word for signal values.							
		4	Being able to use LAD, FBD, STL programming languages							
		5	Being able to use organization blocks							
		6	Being able to use functions							
		7	Being able to use data blocks							
		8	Being able to use function blocks							
		9								
	-	10								
21	Course Content:									
	Course Content:									
Week	Theoretical		Practice							
1	CPU module		Introduction of laboratory							
2	PLC programming Logic		Digital Input Digital Output Process							
3	Input Output modules		Digital Input Digital Output Process							
4	Timers		Timer circuits							
5	Counters		Counter circuits							
6	Functions		Realization by a function block of the repeated process							
7	Data Blocks		The data block creating, reading and writing							

8	Repe	peating courses first midterm							Th	The data block creating, reading and writing									
9	Funct	nction Blocks							Ар	Application of the function block with different data blocks									
10	Analo	alog Input Output							An	Analog Input Output process									
11	Opera	perator Panel							Da	Data input output via screen									
12	PID n	D module								ntrol c	ircuit a	pplicati	on						
13	Repe	epeating courses second midterm								ntrol c	ircuit a	pplicati	on						
14	PID n	D module								ntrol c	ircuit a	pplicati	on						
22	Textb Mater	Textbooks, References and/or Other Materials:								Course notes, Siemens web site									
23 Assesment									WEIGHT										
IERML	EARN	IING	ACT	VIIIES			R	UMBE		WEIGHT									
Midtern	n Exar	m					2		50.	50.00									
Quiz							0		0.0	0									
Home v	work-p	oroje	ect				0		0.0	0									
Final E	xam						1		50.	00									
Total							3		100	0.00									
Contrib	ution o	of To	erm (`	Year) l	Learn	ing Act	ivities	to	50.	50.00									
Succes	is Gra						<u>.</u>												
Contrib	oution		inal E	xam to		cess G	rade		50.	50.00									
Activites							1	Numb	er		Dura	ition (hour)	Total Work Load (hour)					
THE FORE TS / WORK LOAD TABLE								1	4			2.00		28.00					
Practicals/Labs								1	4			2.00	2.00			28.00			
Self study and preperation								1	14				2.00			28.00			
Homeworks								C	0				0.00			0.00			
Projects								C)			0.00			0.00				
Field Studies								C	0				0.00			0.00			
Midterm exams								2	2				10.00			20.00			
Others								C	0					0.00					
Final Exams								1	1)	20.00					
Total Work Load														124.00					
Total work load/ 30 hr									4.13						4.13				
ECTS Credit of the Course																			
25	25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																		
	P	Q1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16		
ÖK1	1		1	3	5	4	4	2	2	5	5	1	0	0	0	0	0		
ÖK2	0		0	3	5	5	3	2	4	5	0	0	0	0	0	0	0		
ÖK3	0		0	3	5	5	4	4	4	5	0	0	0	0	0	0	0		
ÖK4	0		2	2	5	5	0	5	5	5	0	0	0	0	0	0	0		

ÖK5	1	1	1	5	5	5	4	2	3	5	1	0	0	0	0	0
ÖK6	0	0	1	5	5	3	4	2	3	0	0	0	0	0	0	0
ÖK7	1	1	0	0	5	5	4	2	3	2	1	0	0	0	0	0
ÖK8	1	1	1	5	5	2	1	5	5	2	1	0	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				