	ELECTR	OCHE	MICALMETHODS						
1	Course Title:	ELECTR	OCHEMICALMETHODS						
2	Course Code:	FZK5309)						
3	Type of Course:	Optional							
4	Level of Course:	Second (Cycle						
5	Year of Study:	1							
6	Semester:	1							
7	ECTS Credits Allocated:	6.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:	Basic Ph Basic Ch							
12	Language:	Turkish							
13	Mode of Delivery:	Face to f							
14	Course Coordinator:	Doç. Dr.	MÜRŞİDE ŞAFAK HACIİSMAİLOĞLU						
15	Course Lecturers:								
16	Contact information of the Course Coordinator:	msafak@	MÜRŞİDE ŞAFAK HACIİSMAİLOĞLU 9 uludag.edu.tr, (0224) 29 41 697, UÜ Fen Edebiyat i, Fizik Bölümü 16059 Görükle Kampüsü Bursar						
17	Website:								
18	Objective of the Course:		of this course is to learn the fundamentals of hemical methods and its industrial applications						
19	Contribution of the Course to Professional Development:		g Industrial material decoration, corrosion, coating, micro- technological applications						
20	Learning Outcomes:								
		1	Learning Fundamentals of electrodeposition						
		2	Learning deposition of metals and alloys						
		3	learning Metal coating, corrrosion, decoraiton materials						
		4	Learning fabrication of materials by electrodeposition						
		5	Learning factors affecting the deposition conditions						
		6	Learning industrial applications of electrodeposition						
		7	Learning fabrication of mikro and nano- materials						
		8	Learning application of magnetic and microelecttronic in Industrial fields.						
		9							
24	Course Content:	10							
21		<u> </u>	ourse Content:						
Week	Theoretical	00	Practice						
1	Fundametals of electrodeposition								
2	Electrodes, solutions, interfaces and electrode potentials	l							
3	Kinetics and mechanism of electrode	position							
4	Nucleation and Growth models								
5	Deposition types								
L			1						

6	Parameters affecting electrodeposition																		
7	Deposition of Metals I Ni, Cu, Fe, Co, Zn																		
8	Deposition of Metals II, Cr, Mn, Ag, Au, Pt																		
9	Deposition of Alloys																		
10	Structure and properties of deposits.																		
11	Electrochemical charaterisations																		
12	Elec	trode	epositi	on of	Nanor	nateria	als												
13	Application of electrodeposition to magnetic and microelektronic fields																		
14	Application in Lab. for metal ve alloy deposition																		
22	Materials:								F DE Pl	 MILAN PAUNOVIC and MORDECHAY SCHLESINGER, FUNDAMENTALS OF ELECTROCHEMICAL DEPOSITION, A JOHN WILEY & SONS, INC., PUBLICATION, second edition, new Jersey (2006) Yuliy D. Gamburg • Giovanni Zangari, Theory and Practice of Metal Electrodeposition, Spiringer, (2011) 									
23	Assesment												louepot		opininge	1, (2011))		
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ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	ution				2 low			3 Medium			4 Hig	h	5 Very High			