HEAT PUMP APPLICATIONS										
1	Course Title:	HEAT PL	UMP APPLICATIONS							
2	Course Code:	İSOS224	•							
3	Type of Course:	Optional								
4	Level of Course:	Short Cy	cle							
5	Year of Study:	2								
6	Semester:	4								
7	ECTS Credits Allocated:	3.00								
8	Theoretical (hour/week):	2.00								
9	Practice (hour/week):	0.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	Absent								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Prof. Dr. SALİH COŞKUN								
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğreti elemanları								
16	Contact information of the Course Coordinator:	Prof. Dr. Salih COŞKUN								
17	Website:									
18	Objective of the Course:	Learn wo systems. in heat p	orking principles of heat pump systems. Classify heat pump Explain functions of accessory components. Explain faults umps sytems							
19	Contribution of the Course to Professional Development:	raising q	ualified personnel for the air conditioning sector							
20	Learning Outcomes:									
		1	Classify all heat pump systems							
		2	Understand heating and cooling cycle of heat pump							
		3	Identify functions of all components of heat pumps							
		4	Learn control system of the heat pump							
		5	Learn how describes performance coefficient of heat pump							
		6	Learn installation stages of air and geothermal heat pumps							
		7	Know faults encountered the heat pump systems							
		8								
		9								
		10								
21	Course Content:									
		Co	urse Content:							
Week	Theoretical		Practice							
1	Reverse- cycle refrigeration, heat so winter, the four-way reversing valve	urces for								
2	The Air-to Air heat pump, refrigerant identification, metering devices	lines								
3	Thermostatic expansion valves, the of tube, electronic expansion valves, or metering devices, liquid line accesso	capillary ifice pries								

4	Applica heat, ba perform	tion of alance ance	Air-to-a point, o	air hea coeffic	at pum cient of	p, Au	xilary										
5	Split sy unit, air outdoor	stem A tempe unit in	ir-to-Ai erature istallati	ir heai of cor ons	t pump nditione	, The ed air,	indoor , the										
6	Packag to-air h	e Air-to eat pur	o-Air he np	eat pu	mp, co	ontrols	s for air-										
7	defrost auxilary	cycle, heat	indoor	fan m	otor co	ontrol,											
8	Servicir troubles mechar compre	vicing the Air-to-Air heat pump, ubleshooting the electrical system, the chanic problems, the four-way valve, the npressor, checking the charge															
9	Special pumps system	ecial application for heat pumps, Heat nps using scroll compressors, heat pump stems with variable speed controls															
10	Geothe refriger classific	rmal he ation, g ations	eat pur geother	nps: r mal h	everse eat pu	- cycl mp	e										
11	Open-lo loop sy	op sys stems	stems,	water	quality	/, clos	ed-										
12	Ground materia	loop c ls and	onfigira heat ea	ations xchan	and flo ge fluio	ows, s ds	system										
13	Geothe loop sy	rmal w stems,	ells an water-	d wate to-wa	er sour ter hea	ces fo it purr	or open nps										
11	Trouble	shaatii	na dire	ect de	otherm	al he	at					1					
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LO: Learning Objectives PQ: Program Qualifications																
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