

ENERGY MANAGEMNT

1	Course Title:	ENERGY MANAGEMNT	
2	Course Code:	END5564	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	7.50	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ERDAL EMEL	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	erdal@uludag.edu.tr Tel: 0224 294 2080 Endüstri Mühendisliği Bölümü, Mühendislik Mimarlık Fakültesi Uludağ Üniversitesi, Görükle, Bursa	
17	Website:	http://endustri.uludag.edu.tr	
18	Objective of the Course:	The purpose of the course is to help students gain knowledge and skills on issues such as the process of implementation of new technologies, the process of technology transfer within the organization, the importance of energy cost and energy industries and the creation of the management process.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To have knowledge about the process of implementation of new technologies
		2	Understand the process of technology transfer within the organization
		3	Consideration of various options to solve complex problems and understanding decision making
		4	Comprehension of the environmental impact of business processes
		5	To know the effects of current government policies on business decisions to be taken
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	What is Energy?		

2	The importance of energy for industries in terms of costs	
3	The concept of energy efficiency and energy management	
4	The creation of an energy management process	
5	Provision of energy saving lighting systems	
6	Heating, ventilation and air conditioning systems, energy efficiency	
7	Thermal insulation systems to prevent loss of energy	
8	Effective strategies for energy saving	
9	The concept of sustainable energy and green building designs for energy	
10	Identification and evaluation of alternative energy sources	
11	Energy management, environmental factors	
12	Approach to energy management policy	
13	Local and Global Energy Management Systems	
14	Course Review	
22	Textbooks, References and/or Other Materials:	<p>"Guide to Energy Management", KENNEDY, W.J., TURNER, W.C., CAPEHART, B.L., , 6th Edition, The Fairmont Press, Inc., USA (2008).</p> <p>"Industrial Energy Management and Utilization", WITTE, L. C., SCHMIDT, P.S., BROWN, D.R., Hemisphere Publishing Corporation, USA (1988).</p>
23	Assesment	
TERM LEARNING ACTIVITIES		NUMBE R
		WEIGHT
Midterm Exam		1
Quiz		0
Home work-project		3
Final Exam		1
Total		5
Contribution of Term (Year) Learning Activities to Success Grade		70.00
Contribution of Final Exam to Success Grade		30.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	13	8.00	104.00
Homeworks	3	26.00	78.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	0	0.00	0.00
Final Exams	1	2.00	2.00
Total Work Load			228.00
Total work load/ 30 hr			7.60
ECTS Credit of the Course			7.50

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	4	4	0	5	5	0	0	0	0	0	0	0	0	0	0
ÖK2	4	4	4	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK3	4	4	4	0	5	5	0	0	0	0	0	0	0	0	0	0
ÖK4	4	4	4	0	5	5	0	0	0	0	0	0	0	0	0	0
ÖK5	4	4	4	0	5	5	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			