

DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGIES
COURSE SYLLABUS

Course Details				
Code	Academic Year			Semester
EBT402	4			8
Title	T	A	L	ECTS
Energy Management	3	2	0	6
Language	German			
Level	Undergraduate	X	Graduate	Postgraduate
Department / Program	Energy Science and Technologies			
Forms of Teaching and Learning	Face to face			
Course Type	Compulsory	X	Elective	
Objectives	The students obtain a deep knowledge about the legal framework of energy supply. They learn political decision making as well as energy policy in national and international levels. They learn the processes and procedures about the applications of infrastructure measures and the important social processes on energy supply.			
Content	National and international level of law and politics of energy, Energy Management Regulations and Systems, National and International Energy Markets, Infrastructure Measures, Power Plant Construction and Connections, Social Issues Related to Energy.			
Prerequisites				
Coordinator				
Lecturer(s)				
Assistant(s)				
Work Placement	No			
Recommended or Required Reading				
Books / Lecture Notes				
Other Sources				
Additional Course Material				
Documents				
Assignments				
Exams				
Course Composition				
Mathematics und Basic Sciences				%
Engineering				20%
Engineering Design				20%
Social Sciences				%
Educational Sciences				%

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Natural Sciences			20%
Health Sciences			%
Expert Knowledge			40%
Assessment			
Activity		Count	Percentage (%)
Midterm Exam		1	40
Quiz			
Assignments			
Attendance			
Recitations			
Projects			
Final Exam		1	60
		Total	100
ECTS Points and Work Load			
Activity	Count	Duration	Work Load (Hours)
Lectures	15	2	30
Self-Study	15	6	90
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	1	2	2
Recitations	15	2	30
Laboratory			
Projects	1	30	30
Final Exam	1	2	2
		Total Work Load	184
		ECTS Points (Total Work Load / Hours)	6
Learning Outcomes			
1	Providing basic information about energy resources		
2	Giving general information about sustainability		
3	Giving basic information about the efficient use of energy		
4	Emphasizing the importance of heat recovery applications		
5	Importance of measurement		
6			
7			
8			

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9	
10	
11	
12	

Weekly Content

1	General Descriptions: Library and literature studies related to the course will be carried out.
2	General Energy Situation of Turkey and the World and the Structure of Turkish Industry
3	Energy Management Principles
4	Energy Saving Survey Methods, Energy Accounting
5	The Importance of Measurement, Instrumentation and Process Control
6	Isolation
7	Combustion Systems in Heat Production Facilities
8	Midterm
9	Efficiency Calculations in Boilers
10	Steam Production and Distribution Systems
11	Heat Recovery from Condensate and Blowdown
12	Heat Recovery from Condensate and Blowdown
13	Homework presentation
14	Homework presentation

Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	P2	P3	P4	P5	P6	P7
1	4	5	4	4	4	4	4
2							
3							
4							
5							
6							
7		3	4	5	3	4	5
8							
9							
10							
11							
12							

Contribution Level 1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High



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Compiled by:	
Date of Compilation:	