

DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGY
COURSE SYLLABUS

Course Details				
Code	Academic Year			Semester
EBT403	4			7
Title	T	A	L	ECTS
Energy Economy and Policies	2	2	0	6
Language	German			
Level	Undergraduate	X	Graduate	Postgraduate
Department / Program	Energy Science and Technology			
Forms of Teaching and Learning	Face-to-face			
Course Type	Compulsory	X	Elective	
Objectives	The Energy Economics and Policies course aims to examine and understand the economic interactions and roles of policies in the energy sector. This course aims to teach students the fundamental concepts in the energy sector and their economic contexts by investigating the economic impacts of energy resources' production, distribution, consumption, and pricing. Additionally, by emphasizing that the determination and implementation of energy policies should consider not only economic factors but also social and environmental dimensions, the course aims to help students understand the multidimensional nature of energy policies.			
Content	The course examines the production, distribution, and consumption of energy resources and evaluates the economic impacts of energy pricing by addressing the fundamental concepts of the energy sector. It also encompasses the determination and implementation of energy policies, considering social, environmental, and economic factors, aiming to convey the multidimensional nature of energy policies to students. By focusing on the economic effects of energy supply and demand, it analyzes competitive energy markets and discusses the impact of energy policies on sustainability goals.			
Prerequisites	None			
Coordinator	Dr. Meltem KARAİSMAİLOĞLU ELİBOL			
Lecturer(s)	Dr. Meltem KARAİSMAİLOĞLU ELİBOL			
Assistant(s)	None			
Work Placement	None			
Recommended or Required Reading				
Books / Lecture Notes	<ul style="list-style-type: none"> • Turner, W.C., Doty, S. 2006. Energy Management Handbook. Fairmont Press. ISBN: 0-88173-542-6. • Thumann, A., Woodroof, E.A., 2005. Handbook of Financing Energy Projects. CRC Press. ISBN-10: 0849336678 • Ströbele, W., Pfaffenberger, W., Heuterkes, M., 2012. Energiewirtschaft: Einführung in die Theorie und Politik, München: De Gruyter Oldenbourg Ebook. 			
Other Sources	None			

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Additional Course Material			
Documents			
Assignments	1 Assignment		
Exams	1 Midterm exam + 1 Final exam		
Course Composition			
Mathematics and Basic Sciences	-	%	
Engineering	60	%	
Engineering Design	-	%	
Social Sciences	20	%	
Educational Sciences	-	%	
Natural Sciences	20	%	
Health Sciences	-	%	
Expert Knowledge	-	%	
Assessment			
Activity	Count	Percentage (%)	
Midterm Exam	1	40	
Quiz	-	-	
Assignments	2	20	
Attendance	-	-	
Recitations	-	-	
Projects	-	-	
Final Exam	1	40	
	Total	100	
ECTS Points and Work Load			
Activity	Count	Duration	Work Load (Hours)
Lectures	14	4	56
Self-Study	14	4	56
Assignments	2	30	60
Presentation / Seminar Preparation	-	-	-
Midterm Exam	1	3	3
Recitations	-	-	-
Laboratory	-	-	-
Projects	-	-	-
Final Exam	1	3	3
	Total Work Load		178

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ECTS Points (Total Work Load / Hour)	6
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Learning Outcomes

1	Students learn about the complex relationships between the technical, economic, and political aspects of energy supply.
2	Students learn the fundamental concepts of the energy sector, including the production, distribution, and consumption of energy resources.
3	Students learn about the key considerations in determining energy policies.
4	Students gain an understanding of the economic determinants used in energy economics.

Weekly Content

1	Fundamentals of Energy Economics
2	Energy Sources and Production
3	Energy Distribution and Consumption
4	Energy Pricing and Market Models
5	Definition and Importance of Energy Policies
6	Economic Factors in Determining Energy Policies
7	Social and Environmental Dimensions of Energy Policies
8	Social and Environmental Dimensions of Energy Policies, Midterm Exam
9	Economic Effects of Energy Supply and Demand
10	Competitive Energy Markets and Analysis
11	National and International Dimensions of Energy Policies
12	Future of Energy Policies and Trends
13	Current Issues and Debates in Energy Policies
14	Student Assignment Presentations
15	Final Exam

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

	P1	P2	P3	P4	P5	P6	P7	P8	P9
1	4	5	3	5	3	5	4	3	5
2	4	5	4	5	4	5	3	4	5
3	3	4	4	5	4	4	4	4	5
4	3	4	4	4	3	5	5	3	4

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

Compiled by:

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Date of Compilation:

13.04.2024