

DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

Course Details				
<b>Code</b>	<b>Academic Year</b>			<b>Semester</b>
EBT406	4			8
<b>Title</b>	<b>T</b>	<b>A</b>	<b>L</b>	<b>ECTS</b>
Energy Management	3	2	0	6
<b>Language</b>	German			
<b>Level</b>	<b>Undergraduate</b>	X	<b>Graduate</b>	<b>Postgraduate</b>
<b>Department / Program</b>	Energy Science and Technology			
<b>Forms of Teaching and Learning</b>	Face-to-face			
<b>Course Type</b>	<b>Compulsory</b>	X	<b>Elective</b>	
<b>Objectives</b>	Students gain in-depth knowledge about the legal framework for energy supply. They learn about national and international energy policies as well as political decision-making processes at various levels. They understand the processes and procedures related to the implementation of infrastructure measures in the energy sector and the social processes crucial for energy supply.			
<b>Content</b>	National and international energy law and policy are examined. Energy management legislation and systems are demonstrated. National and international energy markets and infrastructure measures are studied. Plant construction and connections, as well as social issues related to energy, are addressed.			
<b>Prerequisites</b>	None			
<b>Coordinator</b>	Dr. Osman Sinan SÜSLÜ			
<b>Lecturer(s)</b>	Dr. Osman Sinan SÜSLÜ			
<b>Assistant(s)</b>	None			
<b>Work Placement</b>	None			
Recommended or Required Reading				
<b>Books / Lecture Notes</b>	<ul style="list-style-type: none"> <li>B.L.Capehart, W.C.Turner,W.J. Kennedy, "Guide to Energy Management," Fairmont Press, 7th edition, 2012.</li> <li>S.Doty, W.C.Turner, Energy Management Handbook,Fairmont Press, 2009.</li> <li>F.Kreith, D.Y.Goswami, Energy Management and Conversation Handbook, CRC Press, 2008.</li> </ul>			
<b>Other Sources</b>	None			
Additional Course Material				
<b>Documents</b>				
<b>Assignments</b>				
<b>Exams</b>	1 Midterm exam + 1 Final exam			

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Course Composition		
Mathematics and Basic Sciences	-	%
Engineering	20	%
Engineering Design	20	%
Social Sciences	-	%
Educational Sciences	-	%
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
<b>Total</b>		<b>100</b>

ECTS Points and Work Load			
Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	14	6	84
Assignments	-	-	-
Presentation / Seminar Preparation	-	-	-
Midterm Exam	1	2	2
Recitations	14	2	28
Laboratory	-	-	-
Projects	1	36	36
Final Exam	1	2	2
<b>Total Work Load</b>			<b>180</b>
<b>ECTS Points (Total Work Load / Hour)</b>			<b>6</b>

Learning Outcomes	
1	Students acquire basic knowledge about efficient energy use in this course.
2	Students gain knowledge about the legal framework for energy supply.

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3	Students learn about the current energy policy at national and international levels as well as various levels of political decision-making processes.
4	Students are knowledgeable about the processes and procedures for implementing infrastructure measures in the energy sector and learn about the social processes important for energy supply.
<b>Weekly Content</b>	
1	National and International Energy Law and Policy 1
2	National and International Energy Law and Policy 2
3	National and International Energy Law and Policy 3
4	Energy Management Legislation and Systems 1
5	Energy Management Legislation and Systems 2
6	Energy Management Legislation and Systems 3
7	Automation Systems
8	National and International Energy Markets 1, Midterm Exam
9	National and International Energy Markets 2
10	Infrastructure Measures
11	Power Plant Construction and Connections
12	Social Issues Related to Energy 1
13	Social Issues Related to Energy 2
14	Socioeconomic Impact of Energy
15	Final Exam

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

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

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

**Compiled by:**

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