DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGIES
COURSE SYLLABUS

Course Details				
Code	**Academic Year**			**Semester**
PRK400	4			8
Title	**T**	**A**	**L**	**ECTS**
Internship Seminar	2	0	0	5

Language	German					
Level	**Undergraduate**	**X**	**Graduate**		**Postgraduate**	
Department / Program	Energy Science and Technology					
Forms of Teaching and Learning	Face-to-face					
Course Type	**Compulsory**		**Elective**	**X**		
Objectives	To gain knowledge and experience in the application fields of Energy Science.					
Content	Selected study topics from the application areas of Energy Science are covered. Topics such as Product Development / R&D, as well as Material and Manufacturing Process Development, are learned. Areas such as Automation in Energy Systems, Manufacturing / Production Planning, Assembly, Maintenance and Repair are discussed. Systems like Project Planning, Design and Analysis, Testing and Verification, and Quality Control and Quality Management are also covered.					
Prerequisites	-					
Coordinator	Assist. Prof. Dr. Osman Sinan SÜSLÜ					
Lecturer(s)	Assist. Prof. Dr. Osman Sinan SÜSLÜ					
Assistant(s)						
Work Placement	None					

Recommended or Required Reading	
Books / Lecture Notes	Juliane Braenzel, Dirk Engelmann, Olaf SchulzeEnergiemanagement: Praxisbuch für Fachkräfte, Berater und Manager , ? Springer Vieweg; 2., überarb. Aufl. 2019
Other Sources	Lecture slides

Additional Course Material	
Documents	-
Assignments	-
Exams	-

Course Composition

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Mathematics und Basic Sciences		%
Engineering	30	%
Engineering Design	30	%
Social Sciences		%
Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge	40	%

Assessment

Activity	Count	Percentage (%)
Midterm Exam		
Quiz		
Assignments		
Attendance		
Recitations		
Projects	1	100
Final Exam		
	Total	**100**

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	8	12	96
Assignments			
Presentation / Seminar Preparation			
Midterm Exam			
Recitations			
Laboratory			
Projects	1	30	30
Final Exam			
		Total Work Load	**154**
		ECTS Points (Total Work Load / Hours)	**5,13**

Learning Outcomes

1	Gain experience in the application areas of Energy Science
2	Gain experience in workflows and business processes
3	Gain experience in planning and scheduling

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4	Take responsibility in the work environment
5	Gain experience in teamwork
6	Gain experience in occupational safety

Weekly Content	
1	Introduction
2	Product Development / R&D
3	Material and Manufacturing Process Development
4	Automation
5	Manufacturing / Production Planning
6	Assembly
7	Maintenance-Repair
8	Midterm Week
9	Project Planning
10	Design and Analysis
11	Testing and Verification
12	Quality Control and Quality Management
13	Discussion
14	Discussion
15	Discussion
16	Finals Week

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

	P1	**P2**	**P3**	**P4**	**P5**	**P6**	**P7**	**P8**	**P9**
1	4	4	4	5	4	3	3	4	4
2	4	4	4	4	4	3	3	4	4
3	5	4	4	3	4	3	3	5	4
4	4	4	4	5	4	3	3	3	4
5	5	4	4	4	4	3	3	4	4
6	5	4	4	4	3	3	3	4	4

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

https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=EN&curSunit=5706

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