

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

Course Details				
<b>Code</b>	<b>Academic Year</b>			<b>Semester</b>
MWT402	4			8
<b>Title</b>	<b>T</b>	<b>A</b>	<b>L</b>	<b>ECTS</b>
Project II (Bachelor Thesis)	1	0	7	12
<b>Language</b>	German			
<b>Level</b>	<b>Undergraduate</b>	X	<b>Graduate</b>	<b>Postgraduate</b>
<b>Department / Program</b>	Materials 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>	To provide the student with the ability to analyze the problem/system with which he/she is dealing and to develop solution ideas considering theoretical knowledge. To provide a useful experience through a self study to take the first step to his/her new career which will start after graduation. The student will communicate his/her study efficiently, verbal and written, so he/she will learn to express himself/herself better.			
<b>Content</b>	To provide the student with the ability to analyze the problem/system with which he/she is dealing and to develop solution ideas considering theoretical knowledge. ii. To provide a useful experience through a self study to take the first step to his/her new career which will start after graduation. iii. The student will communicate his/her study efficiently, verbal and written, so he/she will learn to express himself/herself better.			
<b>Prerequisites</b>	MWT401			
<b>Coordinator</b>	Asist Prof.Dr. Duygu Ekinci			
<b>Lecturer(s)</b>				
<b>Assistant(s)</b>				
<b>Work Placement</b>	No			
Recommended or Required Reading				
<b>Books / Lecture Notes</b>	Scientific Journals and Books related to the field			
<b>Other Sources</b>	Will be disseminated to the students in digital form			
Additional Course Material				
<b>Documents</b>				
<b>Assignments</b>				
<b>Exams</b>				
Course Composition				
<b>Mathematics und Basic Sciences</b>				%
<b>Engineering</b>				40%

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

Engineering Design		40%
Social Sciences		%
Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge		20%

**Assessment**

Activity	Count	Percentage (%)
Midterm Exam		
Quiz		
Assignments		
Attendance		
Recitations		
Projects	1	100
Final Exam		
<b>Total</b>		<b>100</b>

**ECTS Points and Work Load**

Activity	Count	Duration	Work Load (Hours)
Lectures	14	4	56
Self-Study	14	16	224
Assignments			
Presentation / Seminar Preparation	1	35	35
Midterm Exam			
Recitations			
Laboratory			
Projects			
Final Exam	1	40	40
<b>Total Work Load</b>			<b>355</b>
<b>ECTS Points (Total Work Load / Hours)</b>			<b>12</b>

**Learning Outcomes**

1	Formulate and analyze a problem by examining the current status
2	Develop applicable suggestions and/or solution methods for the problem dealt with, considering theoretical knowledge.
3	Gain the ability to implement a solution method to an existing problem and will be able to evaluate the results.
4	Learn to express himself/herself by reporting and presenting the work.
5	Learn to defend the idea that underlines the results of the study.

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

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8	
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11	
12	

**Weekly Content**

1	Selected study topics in the application areas of Material Science - Product development / R&D - Materials and process development - Automation - Production / production planning - Assembly - Maintenance and overhaul - Project planning - Design and analysis - Test and verification - Quality control and quality management
2	Selected study topics in the application areas of Material Science - Product development / R&D - Materials and process development - Automation - Production / production planning - Assembly - Maintenance and overhaul - Project planning - Design and analysis - Test and verification - Quality control and quality management
3	Designing the instruments/tools etc. to achieve the objective / formulating solution alternatives
4	Designing the instruments/tools etc. to achieve the objective / formulating solution alternatives
5	Designing the instruments/tools etc. to achieve the objective / formulating solution alternatives
6	Evaluate alternatives (use the relevant background data) and choose a solution
7	Evaluate alternatives (use the relevant background data) and choose a solution
8	Implementation of the solution (optional)
9	Implementation of the solution (optional)
10	Implementation of the solution (optional)
11	Discussion of the results and implications (global, economic, social, environmental) of your III solution
12	Discussion of the results and implications (global, economic, social, environmental) of your III solution
13	Report the study and the findings
14	Report the study and the findings
15	

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

	P1	P2	P3	P4	P5	P6	P7
1	5	5	5	5	5	5	5
2							
3							
4							
5							
6							
7							



DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

8							
9							
10							
11							
12							
<b>Contribution Level</b>	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High						
<b>Compiled by:</b>							
<b>Date of Compilation:</b>							