

DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGIES **COURSE SYLLABUS**

Course Details								
Code				Acade	Academic Year			ster
EWT311				2	2			
Title						L	ECTS	
Measurement Techniques in Energy	gy Systems			2	1	0	4	
Language	German	German						
Level	Undergraduate X Graduate Postgraduate					duate		
Department / Program	Department of Ene	ergy Science ar	nd Technology	(German)				
Forms of Teaching and Learning	Face to Face							
Course Type	Compulsory			Ele	Elective 2			
Objectives	 To gain the necessary formation by providing in-depth information on the measurement of many different physical sizes that can be encountered in energy technologies, as well as theoretical knowledge on subjects such as evaluation of measured data, determination of measurement errors. It is aimed to develop the skills of the students in these subjects in line with the needs of the sector and to provide an infrastructure that will provide advantage in both thesis studies and post-graduation, domestic and international ion applications 							
Content	This course covers measurement technique, sensors and measuring instruments in energy technologies. For this purpose, measurement technique, error analysis and methods used in processing experimental data will be explained. After focusing on the calibration of measuring sensors and instruments, in-depth information will be given about the measurement techniques of physical quantities that can be encountered in energy technologies.							
Prerequisites								
Coordinator								
Lecturer(s)								
Assistant(s)								
Work Placement	rk Placement							
Recommended or Required Reading								
Books / Lecture Notes								
Other Sources								
Additional Course Material								
Documents								
Assignments								
Exams								
Course Composition								
Mathematics und Basic Sciences							% 0	



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Engineering		% 60			
Engineering Design		% 40			
Social Sciences			% 0		
Educational Sciences		% 0			
Natural Sciences			% 0		
Health Sciences			% 0		
Expert Knowledge			% 0		
Assessment					
Activity	Cou	nt	Percentage (%)		
Midterm Exam	1	% 40			
Quiz	0	% 0			
Assignments	0	% 0			
Attendance	0	% 0			
Recitations	1	% 20			
Projects	0	% 0			
Final Exam	1	% 40			
		Total	100		
ECTS Points and Work Load					
Activity	Count	Duration	Work Load (Hours)		
Lectures	15	3	45		
Self-Study	15	1	15		
Assignments					
Presentation / Seminar Preparation					

Learning	Outcomes
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Midterm Exam

Recitations Laboratory Projects

Final Exam

1	Students will learn measurement technique, sensors and measuring instruments in energy technologies.
2	
3	
4	
5	

1

1

2

2

ECTS Points (Total Work Load / Hours)

Total Work Load

2

2

64

2



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6							
7							
8							
9							
10							
11							
12							
Weekly Conten	it						
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15							
Contribution of Learning Outcomes to Program Objectives (1-5)							
	P1	P2	P3	P4	P5	P6	P7
1							
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10							



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COURSE SYLLABUS

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Contribution Leve	el	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High						
Compiled by:								
Date of Compilat	ion:	08.03.2021						