



Çanakkale Onsekiz Mart University

Education Information System

DEGREE PROGRAMMES

BOLOGNA

THE INSTITUTION

INFO FOR STUDENTS

You are here : [Home](#) [Master's Degree& Doctorate Degree](#) [Physics \(Master\)](#) [Wind Energy Applications II](#) **Course Information**

Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Wind Energy Applications II	FZ 5060		3 + 0	3.0	7.5

Prerequisites	None
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Language of Instruction	Turkish
Course Level	Second Cycle
Course Type	Elective
Mode of delivery	Face to face
Course Coordinator	Prof. Dr. İsmail TARHAN
Instructors	Prof. Dr. İsmail TARHAN
Assistants	
Course Objectives	Students registered to this course will get scientific application, data analysis, final evaluation and examination skills by learning required techniques for the wind measurement.
Course Content	The main topics of the course intent are wind turbines and the basic elements, aerodynamics of wind turbines, wind turbine power generation, certificates and the certification of wind turbines, security of wind turbine, project planing of wind power plants, management of wind powers plants, operation and maintenance of wind power plants, environmental impacta of wind power plants, noise in wind power plants, electromanyetic effects of wind power plants, offshore wind farms, hybrid systems, economics of wind energy.
Course Learning Outcomes	<ol style="list-style-type: none"> 1) Evaluate wind energy applications 2) Explain wind turbines. 3) Apply the installation of wind turbines 4) Analyze wind turbines

Quick Access

Physics (Master)

- Qualification Awarded
- Level of Qualification
- Qualification Requirements and Regulations
- Specific Admission Requirements
- Recognition of Prior Learning
- Profile of the Program
- Program Key Learning Outcomes
- Occupational Profile of Graduates
- Access to Further Studies
- Course Structure & Credits
- Exam Regulations & Assessment & Grading
- Graduation Requirements
- Mode of Study
- Programme Director(or Equivalent)
- Evaluation Questionnaire
- TYYÇ

Course Information

- Course Information
- Weekly Course Content
- Resources
- Assessment
- Course Category
- CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES
- ECTS credits and course workload

WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	Wind turbines and the basic elements	Oral lectures with interactive discussions, research, homework	
2. Week	Aerodynamics of wind turbines	Oral lectures with interactive discussions,	

		research, homework	
3. Week	Wind turbine power generation	Oral lectures with interactive discussions, research, homework	
4. Week	Certificates and the certification of wind turbines	Oral lectures with interactive discussions, research, homework	
5. Week	Security of wind turbine	Oral lectures with interactive discussions, research, homework	
6. Week	Project planing of wind power plants	Oral lectures with interactive discussions, research, homework	
7. Week	Management of wind powers plants	Oral lectures with interactive discussions, research, homework	
8. Week	Midterm examination	Oral lectures with interactive discussions, research, homework	
9. Week	Operation and maintenance of wind power plants	Oral lectures with interactive discussions, research, homework	
10. Week	Environmental impacta of wind power plants	Oral lectures with interactive discussions, research, homework	
11. Week	Noise in wind power plants	Oral lectures with interactive discussions, research, homework	
12. Week	Electromanyetic effects of wind power plants	Oral lectures with interactive discussions, research, homework	
13. Week	Offshore wind farms	Oral lectures with interactive discussions, research, homework	
14. Week	Hybrid systems	Oral lectures with interactive discussions, research, homework	
15. Week	Economics of wind energy	Oral lectures with interactive discussions, research, homework	
16. Week	Final exam	Exam	

RESOURCES

Recommended Sources
Durak, M., Özer, S., (2008). Rüzgar Enerjisi: Teori ve Uygulama/Tutorial

ASSESSMENT

Measurement and Evaluation Methods and Techniques		
Mid-term exam, homework, final exam		
In-Term Studies	Quantity	Percentage
Mid Term Exam 1	1	40
Total	1	40
End-Term Studies	Quantity	Percentage
Final Exam	1	60
Total	1	60
Contribution Of In-Term Studies To Overall Grade		40
End-Term Studies		60
Total		100

COURSE CATEGORY

Course Category	Percentage
Support Courses	% 50
Transferable Skills Courses	% 50

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK			
		DK1	DK2	DK3	DK4
<u>PY1</u>	5	5	5	5	5
<u>PY2</u>	5	5	5	4	4
<u>PY3</u>	5	4	5	4	4
<u>PY4</u>	4	4	4	5	5
<u>PY5</u>	4	4	4	4	4
<u>PY6</u>	5	5	5	4	4
<u>PY7</u>	5	5	5	5	5
<u>PY8</u>	4	5	5	5	5
<u>PY9</u>	5	5	5	5	5
<u>PY10</u>	4	4	4	4	5
<u>PY11</u>	4	4	4	4	4
<u>PY12</u>	4	4	4	4	4
<u>PY13</u>	4	5	4	4	4
<u>PY14</u>	4	4	4	4	5
<u>PY15</u>	3	3	3	4	3

*DK = Course's Contribution.

	0	1	2	3	4	5
Level of contribution	None	Very Low	Low	Fair	High	Very High

ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Class Hours (14 weeks)	14	3	42
Final Exam Preparation	1	10	10
Research&Project	3	8	24
Assignment 1	1	20	20
Final Exam	1	3	3
Presentation/Seminar	1	10	10
Mid Term Exam 1	1	3	3
Mid Term Exam Preparation	1	10	10
Further Study	14	5	70
Total Workload			192
Total Workload / 25.5 (s)			7.53
ECTS Credit of the Course			8