



Çanakkale Onsekiz Mart University

Education Information System

DEGREE PROGRAMMES

BOLOGNA

THE INSTITUTION

INFO FOR STUDENTS

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Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Physics Of Noise And Vibration	FZ 5073		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	The main objective of this course is to provide informations on fundamentals of vibration, formation and propagation of noise, wave equation, measurement and controlling of noise and vibration, analysis application.
Course Content	Topics to be covered in this course include are the formation and propagation of sound, noise and properties, mechanism and measurement of hearing, vibration mechanism and properties, effects of noise and vibration, noise and vibration measurements, noise and vibration control, noise sources, noise measurement and analysis, vibration measurement and analysis, hearing protection, vibration suppression, noise and vibration analysis applications,
Course Learning Outcomes	1) describe fundamentals of noise and vibration 2) Explain mechanism of noise and vibration. 3) measure noise and vibration. 4) Analyze the measurement of noise and vibration

WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	The Formation and Propagation of Sound	Oral lectures with interactive discussions, research, homework,	
2. Week	Noise and Properties	Oral lectures with interactive discussions, research,	

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

		homework,	
3. Week	Mechanism and Measurement of Hearing	Oral lectures with interactive discussions, research, homework,	
4. Week	Vibration Mechanism and Properties	Oral lectures with interactive discussions, research, homework	
5. Week	Effects of Noise and Vibration	Oral lectures with interactive discussions, research, homework,	
6. Week	Noise and Vibration Measurements	Oral lectures with interactive discussions, research, homework,	
7. Week	Noise and Vibration Control	Oral lectures with interactive discussions, research, homework	
8. Week	Midterm examination	Oral lectures with interactive discussions, research, homework,	
9. Week	Noise Sources	Oral lectures with interactive discussions, research, homework	
10. Week	Vibration Sources	Oral lectures with interactive discussions, research, homework	
11. Week	Noise Measurement and Analysis	Oral lectures with interactive discussions, research, homework	
12. Week	Vibration Measurement and Analysis	Oral lectures with interactive discussions, research, homework,	
13. Week	Hearing Protection	Oral lectures with interactive discussions, research, homework,	
14. Week	Vibration Suppression	Oral lectures with interactive discussions, research, homework,	
15. Week	Noise and Vibration Analysis Applications	Oral lectures with interactive discussions, research, homework	
16. Week	Final examination	Oral lectures with interactive	

discussions,
research,
homework,

RESOURCES

Recommended Sources

- 1- F. Fahy (1998), Fundamentals of Noise and Vibration, E & FN Spon.
- 2- C. Hansen, S. Snyder (1997) Active Control of Noise and Vibration, E & FN Spon.

ASSESSMENT

Measurement and Evaluation Methods and Techniques

Mid-term exam + Assignment + Research & Project and Presentation 40%, Final Exam 60%

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	DK1	DK2	DK3	DK4
PY1	4	5	4	5	4
PY2	4	4	4	4	4
PY3	5	5	5	4	4
PY4	4	4	4	4	4
PY5	4	4	5	5	5
PY6	5	5	5	5	5
PY7	5	4	4	5	5
PY8	5	5	5	5	5
PY9	4	4	4	4	4
PY10	4	4	5	4	4
PY11	4	4	4	4	5
PY12	4	3	4	4	4
PY13	4	4	4	4	4

PY14	4	3	4	4	4
PY15	4	4	4	4	5

*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)
Final Exam	1	3	3
Presentation/Seminar	1	8	8
Mid Term Exam Preparation	1	10	10
Class Hours (14 weeks)	14	3	42
Final Exam Preparation	1	10	10
Further Study	12	3	36
Research&Project	1	10	10
Mid Term Exam 1	1	3	3
Preliminary Study	14	5	70
Total Workload			192
Total Workload / 25.5 (s)			7.53
ECTS Credit of the Course			8