



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 \(PhD\)](#) [Elekcrodynamics Of Continuous Media](#) **Course Information**

Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Elekcrodynamics Of Continuous Media	FZ6034		3 + 0	3.0	7.5

Prerequisites	None
----------------------	------

Language of Instruction	Turkish
Course Level	Third Cycle
Course Type	Elective
Mode of delivery	Face to face
Course Coordinator	Assoc. Prof. Dr. Hüseyin ÇAVUŞ
Instructors	Assoc. Prof. Dr. Hüseyin ÇAVUŞ
Assistants	
Course Objectives	In this course, electromagnetic waves and their propagation and scattering in (un)isotropic media are explained.
Course Content	Matters and magnetism, Matters and electricity, Electromagnetic wave and its equations, Electromagnetic wave and its equations, Propagation of electromagnetic waves in continuoue media, Propagation of electromagnetic waves in continuoue media, Magnetic fluid dynamics, Wave propagation in unisotropic medium , Wave propagation in unisotropic medium , The passage of particles through matter, Fluctuations of electromagnetic waves, Scattering of electromagnetic waves, Investigation of papers previously given to students , Investigation of papers previously given to students
Course Learning Outcomes	1) make comment on the subjects of electromagnetic waves their behaviour in (un)isotropic media. 2) investigate an advanced level papers about the behaviour of matter and particles in continuou media.

Quick Access

Physics (PhD)

- 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
- 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	Matters and magnetism	Oral lectures Homework Interactive discussions	
2. Week	Matters and electricity	Oral lectures Homework Interactive discussions	

3. Week	Electromagnetic wave and its equations	Oral lectures Homework Interactive discussions	
4. Week	Electromagnetic wave and its equations	Oral lectures Homework Interactive discussions	
5. Week	Propagation of electromagnetic waves in continuous media	Oral lectures Homework Interactive discussions	
6. Week	Propagation of electromagnetic waves in continuous media	Oral lectures Homework Interactive discussions	
7. Week	Magnetic fluid dynamics	Oral lectures Homework Interactive discussions	
8. Week	Wave propagation in unisotropic medium	Oral lectures Homework Interactive discussions	
9. Week	Wave propagation in unisotropic medium	Oral lectures Homework Interactive discussions	
10. Week	The passage of particles through matter	Oral lectures Homework Interactive discussions	
11. Week	Fluctuations of electromagnetic waves	Oral lectures Homework Interactive discussions	
12. Week	Scattering of electromagnetic waves	Oral lectures Homework Interactive discussions	
13. Week	Investigation of papers previously given to students	Oral lectures Homework Interactive discussions	
14. Week	Investigation of papers previously given to students	Oral lectures Homework Interactive discussions	
15. Week	General Review	Oral Lectures	
16. Week	Final Exam	Written Exam	

RESOURCES

Recommended Sources
Landau, L.D. ve Lifshitz, E.M. 1960, Electrodynamics of Continuous Media, Pergamon Press.
P. Lorrain, D. Corson, 1962, Electromagnetic Fields and Waves, Freeman Company
A.R. Choudhuri, 1998, The Physics of Fluids and Plasmas, Cambridge University Press.

ASSESSMENT

Measurement and Evaluation Methods and Techniques

40% Mid Term Exam 60% Final Exam

COURSE CATEGORY

Course Category	Percentage
Core Courses	% 100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK1	DK2
PY1	3	3	3
PY2	3	3	3
PY3	3	2	4
PY4	4	4	4
PY5	4	4	4
PY6	4	4	4
PY7	3	3	3
PY8	3	3	3
PY9	1	1	1
PY10	3	3	3
PY11	3	3	3
PY12	3	3	3
PY13	4	4	4
PY14	3	3	3
PY15	2	2	2

*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
Presentation/Seminar	2	2	4
Final Exam Preparation	1	25	25
Mid Term Exam Preparation	1	21	21
Assignment 1	1	10	10
Further Study	14	2	28
Preliminary Study	14	1	14
Mid Term Exam 1	1	3	3
Final Exam	1	3	3
Research&Project	2	16	32
Assignment 2	1	10	10
Total Workload			192

Total Workload / 25.5 (s)	7.53
ECTS Credit of the Course	8

