

School of Engineering and Natural Sciences / Industrial Engineering (English)

2022 - 2023 Academic Year

PHYSICS II LAB

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
PHYSICS II LAB	IND1210753	Spring Semester	0+2	1	2
Prerequisites Courses	MATEMATİK I				
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Assoc.Prof. Muhammed Fatih TOY				
Name of Lecturer(s)	Lect. Sultan YILDIZ				
Assistant(s)					
Aim	To support and deepen theoretical knowledge				
Course Content	This course contains; Electrostatics, Ohm's Law and Kirchhoff's Law, RC Circuits, Lorentz Force, Transformers and Rectifiers, RLC Circuits.				
Course Learning Outcomes		Teaching Methods	Assessment Methods		
Can correctly use measuring equipment		13	C		
Can setup and operate basic electric circuits		13	C		
Can experimentally test basic laws of electricity and magnetism		13	C		
Compares experiment results with theory and offers interpretation		13	C		
Discusses experiment results		13	C		
Teaching Methods	13: Experiment / Laboratory				
Assessment Methods	C: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Electrostatics				
2	Ohm's Law and Kirchhoff's Law				
3	RC Circuits				
4	Lorentz Force				
5	Transformers and Rectifiers				
6	RLC Circuits				
Evaluation Methods		Weight(%)			
Midterm Exam		30			
General Exam		70			

Resources
Istanbul Medipol University - General Physics 2 - Experiment Manual