

FI460 Wave and Electromagnetism Experiment

Module name:	Wave and Electromagnetism Experiment	
Module level, if applicable:	Undergraduate	
Code:	FI460	
Sub-heading, if applicable:	-	
Classes, if applicable:	-	
Semester:	5 th	
Module coordinator:	Andhy Setiawan	
Lecturer(s):	Andhy Setiawan, Wiendartun, Mohammad Arifin	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course	
Type of Teaching	Contact hours per week during the semester	Class Size
<ol style="list-style-type: none"> 1. Lecture (experiment and presentation) 2. Structured activities for practice preparation and making report 3. Self-study (reading literature) 	2 hours 30 minutes	15
Workload:	Total workload is 90 hours 40 minutes (3.2 ECTS) which consist of 40 hours of laboratory activities (1.41 ECTS) and 50 hours 40 minutes of practice preparation, making report and self-study (1.75 ECTS)	
Credit points:	3.2 ECTS	
Pre-requisites course(s):	FI344 Electricity and Magnetism, FI345 Wave	
Course Learning Outcomes (CLO):	<p>After taking this course the students have ability to:</p> <p>CLO1. Apply concepts of electromagnetic and waves in planning the experiment.</p> <p>CLO2. Conduct experiment in electromagnetic and waves.</p> <p>CLO3. Analyze experimental data as result of experiment in electromagnetic and waves.</p> <p>CLO4. Apply concepts of electromagnetic and waves in discussing the experiment result.</p> <p>CLO5. Make reports and present the results of electromagnetic and wave experiments.</p>	
Content:	Thomson Experiment, Millikan Oil Drop Experiment, Experiment of Light Propagation Speed, Michelson Interferometer Experiment, Hall Effect Experiment, Experiment of Diffraction by Reflection Grid, Experiment of Sound Propagation Speed.	

