

## MODULE HANDBOOK

Module Name	:	Experimental Physics II
Module Level	:	Bachelor
Abbreviation, if applicable	:	FI3104
Sub-heading, if applicable	:	
Semester/ term	:	4
Module Coordinator(s)	:	
Lecturer(s)	:	
Language	:	Bahasa Indonesia
Classification within the curriculum	:	Compulsory Course
Teaching format/ class hours per week during the semester	:	lectures, labwork, independent study
Workload	:	<p>4 hours lectures for the first two weeks, and another 2 hours before the RBL Project</p> <p>2 hours of preparation (individual work), 3 hours of laboratory works, 4 hours of report preparation and presentation, each for 7 weeks</p> <p>6 hours of RBL Project, for 3 weeks + 1 hour for presentation</p> <p>Total of 88 hours a semester</p>
Credits Points	:	2
Requirements	:	FI1101 Basic Physics IA & FI1201 Basic Physics IIA
Leraning goals	:	<p>Knowledge:</p> <p>(1) Able to plan and prepare experiments on several topic : Fluids, Electromagnetism, Thermodynamics, and Modern Physics.</p> <p>Skill:</p> <p>(1) Able to do several physical experiments and retrieve data correctly in the allotted time, with reference to safety standards.</p> <p>(2) Able to analyze and interpret experimental data, and be able to assess whether the data obtained is correct or not.</p> <p>(3) Able to display experimental data well, analyze data, and explain the results clearly, both in written reports and presentations.</p> <p>Competencies:</p> <p>(1) Able to carry out simple research activities in groups, including planning and preparing the research in detail.</p>

Content

: Fluids, Electromagnetism (Charge distribution in metal, Magnetic field by current), Thermodynamics (Efficiency of heat engine, Analysis of thermodynamics cycle), Modern Physics (Frank-Hertz, Electron diffraction)