

## MODULE HANDBOOK

Module Name	: Experimental Physics III
Module Level	: Bachelor
Abbreviation, if applicable	: FI3204
Sub-heading, if applicable	:
Semester/ term	: VI / 3rd year
Module Coordinator(s)	:
Lecturer(s)	:
Language	: Bahasa Indonesia
Classification within the curriculum	: Compulsory Course / <del>Elective Course</del>
Teaching format/ class hours per week during the semester	: 2 hours lectures / lab experiment
Workload	: 2 hours lectures / laboratory works and 4 hours individual study for 16 weeks per semester (96 work hours per semester)
Credits Points	:
Requirements	: FI2205 Experimental Physics I FI3104 Experimental Physics II
Learning goals	: Knowledge: (1) (2)  Skills: (1) Ability to plan and prepare nuclear physics and biophysics experiment in detailed (2) Ability to plan and prepare electronic material physics experiment in detailed (3) Ability to plan and prepare earth and complex system physics experiment in detailed (4) Ability to plan and prepare physics of magnetism and photonics experiment in detailed (5) Ability to plan and prepare advanced characterization experiment in detailed (6) Ability to conduct several experiments in physics and their data acquisition correctly within the specified time, in accordance with safety regulations procedures (7) Ability to analyze and interpret data acquired from the experiments, and make preliminary judgment if the data are correct or not (8) Ability to present experimental data, data analysis and results, both in written report and in oral presentation

	Competence: (1) Ability to conduct a research-like activity in small group
Content	: Four research group based experiments (Nuclear Spectroscopy, Particle Transport Simulation, Geoelectric Method, Seismic Method, Electronic Properties of Material, Electronic Device and Magnetic Properties of Material); Two characterization experiments (Micro-CT, NMR, XRD, SEM, VI characterization); one research based learning experiment