Module Handboook

Module Name	Computational Physics Practice
Modul Level	Undergraduate
Code	23H02120501
Courses (if applicable)	Computational Physics
Semester	Odd (Ganjil)
Contact Person	Eko Juarlin, S.Si., M.Si.
Lecturer	Eko Juarlin, S.Si., M.Si. Bannu Abdul Samad, S.Si., M.Si.
Language	Bahasa Indonesia and English
Relation to Curriculum	Undergraduate degree program, mandatory, 3rd semester
Type of Teaching, Contact Hours	Lectures, < 60 students, Regular: Tuesdays, 10.30-13.00
Workload	1. Practice in classroom: 1 x 50 = 50 minutes (0.83 hours) / week 2. Private study: 2 x 60 = 120 minutes (2 hours) / week
Credit Points	1 Credit Points
Requirements According to the Examination Regulations	A student must have attended at least 75% of the lectures to sit to have results
Mandatory Prerequisites	
Learning Outcomes and Their Corresponding ILOs	After completing this module, a student is expected to CO-1 : Students have script containing minimum algebra, logical expression and function inside (ILO 2) CO-2 : Students have script containing root finding solution (ILO 2) CO-3 : Students have script containing linear equation system solution (ILO 2) CO-4 : Students have script containing numerical differentiation solution (ILO 2) CO-5 : Students have script containing numerical integration (ILO 2)
Study and Examination Requirements and Forms of Examination	• Project 1 • Project 2 • Project 3 • Project 4 • Project 5
Media Employed	LED, Whiteboard, Learning Management System (SIKOLA)
Assessments and Evaluation	PLO-1: Work in project 1 (20 %) PLO-2: Work in project 2 (20 %) PLO-3: Work in project 3 (20 %) PLO-4: Work in project 4 (20 %) PLO-5: Work in project 5 (20%)

Reading List	1. Steven Chapra, Raymond P. Canale, Numerical Methods for Engineers, Mc-Graw Hills 2. Konstantinos N. Anagnostopoulos, Computational Physics, National Technical University of Athens 3. Joe D. Hoffman, Numerical Methods for Engineers and Scientist, Marcel Dekker Inc.