

WI1102 - Computational Thinking

COURSE LESSON PLAN				
STUDY PROGRAM: METEOROLOGY				
FACULTY/SCHOOL: FACULTY OF EARTH SCIENCES AND TECHNOLOGY				
INSTITUT TEKNOLOGI BANDUNG				
Course Code: WI1102		Credits: 2	Semester: 1	Course Type: Compulsory course
Course Name		Berpikir Komputasional		
		Computational Thinking		
Related Course				
Study Materials		Basic concepts of computational thinking: abstraction, algorithms, decomposition, and pattern recognition		Express
		Transformation of computational thinking solutions into computational tools		Express
		Impacts and trends of computing in specific domains		Explore
Learning Outcomes				
Code		LO		
PLO-3.3		Capable of operating computing devices in accordance with learned algorithms to solve standard scientific problems in the field of meteorology.		
Code	CO	Elements of Course Learning Outcomes (CO)		
PLO-3.3	CO1	Students understand the concepts and are able to practice appropriate and directed computational thinking processes for problem-solving.		
	CO2	Students are able to utilize computational thinking techniques to analyze new problems and generate solutions to those problems.		
	CO3	Students are able to utilize computational thinking techniques to analyze new problems and generate solutions to those problems.		
Learning Methods		- Lectures - Case-Based Learning: exercises based on computational thinking case problems - Project-Based Learning: mini projects according to the problem domain of each cluster		
Learning Modalities		- Synchronous - Asynchronous: practicum and project		
Assessment Method		Assessment components: exams, quizzes, problem-solving exercises, and projects		