

## MODULE HANDBOOK DESCRIPTION

Module designation	Object Base Programming Laboratory	
Code	FBD3210	
Semester(s) in which the module is taught	6 / third year	
Person responsible for themodule	Cipta Ramadhani,ST., M.Eng.	
Language	Indonesian	
Relation to curriculum	Elective for Computer Engineering	
Teaching methods	Contextual Instruction (CI)	
Workload (incl. contacthours, self- study hours)	<ul> <li>Contact minutes every week, each week of</li> <li>the 16weeks/semester :</li> <li>Practice : 1 x 50 minutes</li> <li>Data analysis : 1 x 50 minutes</li> <li>Writing report : 1 x 50 minutes.</li> <li>Total study hours = 2 hours 30 minutes/week</li> </ul>	
Credit points	1 (~ 1.6 ECTS)	
Required and recommended prerequisites for joiningthe module	- Object Base Programming (FBD3104)	
Module objectives/intend edlearning outcomes	1. Students are able to analyze basic concepts of Object-based Programming such as Class- Object, Method, String, Encapsulation, and Inheritance.	PLO3
	<ol> <li>Students are capable of writing source code using basic Object-oriented programming concepts such as Class-Object, Method, String, Encapsulation, and Inheritance.</li> </ol>	PLO4
	<ol> <li>Students are able to compare the differences between Class and Object, Method and Constructor, and String and char, and that this was done through an experiment.</li> <li>Students are able to demonstrate their understanding of these concepts and apply them to real-world programming scenarios.</li> </ol>	PLO5

Content	1. Basic concept of Object Base programming	
	2. Class-Object,	
	3. Method,	
	4. Encapsulation,	
	5. Inheritance,	
	6. String.	
Examination forms	1. Pre-test	
	2. Practice skills	
	3. Practice report	
	4. Response	
Study and examination requirements	The final grade in the module is composed of:	
	1. Pre-test and practice skills = $20\%$	
	2. Practice report and response $= 80\%$	
	Students must have a final grade of 65% or higher to pass	
Reading list	1. Introduction to Algorithm, 1989, Thomas H. Cormen,	
	Charles E. Leiserson, Ronald L. Rivest, Clifford Stein. MIT	
	Press.	
	2. Head First Java, 2nd edition, 2008, Bert Bates and Kathy	
	Sierra, O'Reilly.	
	3. Java <sup>TM</sup> How to Program, 9th, 2012, Paul Deitel, Harvey	
	Deitel, Prentice Hall.	
	4. Algoritma dan Struktur Data Dengan Bahasa Java, 2015,	
	Cipta Ramadhani, Andi Publisher.	