

Course Code	TKIT161204P											
Course Name	Lab Work Object Oriented Programming											
Course Instructors	Ridi Ferdiana; Bimo Sunarfi Hantono											
Course Type	Required											
Course Classification	Engineering Topics											
Credit / Contact Hour per Week	1 / 150 minutes per Week for Lab Work											
Course Description	This course will discuss object-oriented programming that applicable to solve complex program in engineering.											
Prerequisites Courses	Fundamentals of Programming (TKIE161103)											
Covered Student Outcome	Development of Engineering Solution (b) Engineering Design (c) Data and Experiment (d) Modern Tools Utilization (e)											
Learning Outcome												
		Study Program Student Outcome										
No	Learning Outcome	SO (a) – SO (k)										
1.	Students are able to <u>use</u> integrated development environment to build object oriented application	Modern Tools Utilization (e)										
2.	Students able to <u>apply</u> object oriented design that solve problem	Engineering Design (c)										
3.	Student can collect various data based on the experiment to apply object oriented application	Data and Experiment (d)										
4.	Student can develop prototype that shows the object-oriented paradigm	Development of Engineering Solution (b)										
Topic	1. Introduction to C# 2. Understanding data type 3. Programming Control in C# 4. Exception 5. Methods in C# 6. Array handling in C# 7. Class implementation in C# 8. Reference Variable											
Direct Asessment	<table border="1"> <thead> <tr> <th>Direct Asessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Assignment – Lab Work Unit 1 -6</td> <td>LO1, LO3</td> </tr> <tr> <td>Final Assignment</td> <td>LO2, LO4</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Asessment Plan	Measured Learning Outcome	Assignment – Lab Work Unit 1 -6	LO1, LO3	Final Assignment	LO2, LO4				
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Final Assignment	LO2, LO4											
Indirect Assesment	Questionnaire (EDOM)											
References	[1] G. M. Hall, Adaptive Code via C#: Agile coding with design patterns and SOLID principles. Microsoft Press, 2014. [2] D. Clark, Beginning C# Object-Oriented Programming, Second Edition. APress, 2013. [3] G. C. Hillar, learning object-oriented programming: explore and crack the OOP code in Python, JavaScript, and C#. Packt Publishing, 2015.											