

# TKU211131P

## Fundamentals of Programming Lab. Work

### Praktikum Pemrograman Dasar

#### BASIC INFORMATION

<b>Course Credit</b>	1 / 150 minutes per Week
<b>Course Type</b>	Required
<b>Course Classification</b>	Engineering Topics
<b>Prerequisites</b>	Fundamentals of Programming

#### STUDENT AND LEARNING OUTCOMES

##### Covered Student Outcomes

Development of Engineering Solution (KP.2)                      Modern Tools Utilization (SK.1)  
Data and Experiments (KP.4)

##### Learning Outcomes

- LO1** Students are able to implement and analyze the use of various data types and operators in C++.
- LO2** Students are able to apply and analyze the concept of programming control statements.
- LO3** Students are able to apply and analyze the concept of modularity and data communication among module and/or functions in C++.
- LO4** Students are able to use and analyze arrays, structures, and unions and dynamic data types in programming.

#### COURSE DESCRIPTION

This course aims to improve student's technical and analytical skill in implementing basic programming concept.

#### TOPICS

1. Introduction to GCC
2. Operator and Data Types
3. Selection Structure
4. Repetition Structure
5. Pointer & Array
6. I/O Function
7. Modular programming
8. Final projects

## REFERENCES

- [1] Programming Principle and Practice Using C++ 2nd Ed. (Bjarne Stroustrup)
- [2] The C++ Programming Language 4th Ed. (Bjarne Stroustrup)