# TKU211121P

# Fundamentals of Programming Lab. Work Praktikum Pemrograman Dasar

## **BASIC INFORMATION**

Course Credit	1 / 150 minutes per Week
Course Type	Required
Course Classification	Engineering Topics
Prerequisites	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)