

Mata Kuliah (MK)	Course Name	: Basic Programming
	Code	: EW184102
	Credits	: 3
	Semester	: I

Description of Course

In this course, students will learn basic programming knowledge, algorithm concepts, structured programming, sequences, repetition, selection, functions, data types, structural concepts and files.

Learning Outcomes

KNOWLEDGE

(P02) Mastering the concepts and principles of engineering, and implementing them in the form of procedures for analysis and design in power systems, control systems, multimedia telecommunications, or electronics

SPECIFIC SKILL

(KK01) Able to formulate engineering problems in power systems, control systems, multimedia telecommunications, or electronics.

GENERAL SKILL

(KU12) Able to implement information and communication technology (ICT) in the context of implementation of his/her work.

ATTITUDE

(S09) Demonstrating attitude of responsibility on work in his/her field of expertise independently
(S12) Working together to be able to make the most of his/her potential.

Course Learning Outcomes

KNOWLEDGE

Students is able to mastering the concept of computer programming algorithms which include collections, repetition and selection, concepts of functions, structures / records and files

SPECIFIC SKILL

Students are able to make computer application programs using the C programming language

GENERAL SKILL

Students are able to make programs in C language to solve scientific problems in the field of electrical engineering

ATTITUDE

Demonstrating attitude of responsibility on work in his/her field of expertise independently

Main Subjects

1. Computer History.
2. Computer system.
3. Number system.
4. Expressions, operands and operators.
5. Computer algorithms, collections, repetition and selection.
6. C. programming language

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7. Data type, and structure.
 8. Array
 9. Sorting data
 10. Sequence and series.

Reference(s)

- [1] Discovering Computers: Fundamentals, Fifth Edition (Shelly Cashman Series) by Gary B. Shelly and Misty E. Vermaat
- [2] Fundamentals of Computer Algorithms by Ellis and Sartaj Sahni Horowitz
- [3] Introduction to Algorithms, Second Edition by Thomas H. Cormen Programming in ANSI C by Stephen G. Kochan

Prerequisite(s)

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