

# Experiments Electronics2

in

# Fundamental

Syllabus Number

3E214

Basic Major Subjects

Elective Requisites 1  
credit

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## 1. Course Description

It is not possible to understand electronics and to design electronic circuits without the knowledge of how to analyze electric circuits.

Based on the knowledge the students acquired in "Electric Circuit 1", they will learn how to analyze the alternating circuits with the Symbolic Solution Method, the Transient Phenomena, and the essential circuit theories. Students will deepen their understanding of electric circuit theories through lab work and classroom lectures. This lesson is related to DP2&DP4E.

## 2. Course Objectives

The objectives of the students in this lesson are to be able to follow:

- (1) Students understand electronic circuits and can create circuits.
- (2) Students can analyze necessary electronic circuits for electronics engineers.
- (3) Students acquire the basic skills of science and technology document preparation.

## 3. Grading Policy

Evaluation is done by experiment report, experiment note and experiment attitude of each theme. Especially if students are absent without a justifiable reason or if students do not submit an experiment report, it is not acceptable to obtain this units. Teachers will add commentary on points to be corrected when returning the report.

## 4. Textbook and Reference

Textbook

Text is distributed in LMS.

## 5. Requirements(Assignments)

Please bring texts, experiment notes, various graph paper, function calculator, and writing instrument related to experiments.

## 6. Note

Students who forget the text cannot do experiments

## 7. Schedule

Characteristics of various semiconductor elements (1) Diode

Characteristics of various semiconductor elements (2) Transistors

Characteristics of various semiconductor elements (3) Impedance of R - L - C circuit

Digital filter (1) Circuit fabrication and filtering

Digital filter (2) Active sensor and filtering

Digital filter (3) Signal extraction by various filtering

Correcting of reports