Experiments of Electronics2

Syllabus Number 3E316
Special Subjects
Elective Requisites 2 credit

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1. Course Description

The aim of this lesson is to learn how to actively collect electronics knowledge and put it into the desired shape.
The 2nd to 5th sessions will include experimental training on sensors and applied work, and the 6th to 14th sessions will include planning, designing, manufacturing, and presentations of products as group activities.
This course is related to DP2 and DP4E of the Diploma Policies.

2. Course Objectives

In accordance with the Diploma Policy, we aim to be an engineer with abundant creativity and excellent problem-solving ability.
(1) Students will can understand the sensor and create a product.
(2) Students will can use electronics technology to propose, produce and present products that solve problems.

3. Grading Policy

(1) Evaluation will be made based on the assignments and reports that will be given in class, group activities and their products and presentations.
(2) In order to complete the course, it is necessary to submit all assignments, reports, products, etc. and pass. Issues and reports will be corrected and returned.

4. Textbook and Reference

Textbook
In the 1st to 5th sessions, materials used in the class will be posted on the LMS.
Reference
Materials will be posted on the LMS as appropriate.

5. Requirements(Assignments)

Preparation: In the 2nd to 5th sessions, read the materials uploaded to the LMS and learn related matters and programs in advance. For the 6th to 14th group activities, learn in advance about the proposed product. (1.5 hours)
Review: Summarize the production techniques, programs, presentations, etc. learned in the class in the experiment notebook. (1.5 hours)

6. Note

This course will be taught in Japanese.
It is desirable to take "Experiments in Fundamental Electronics 1, and 2" and "Experiments of Electronics 1".
Since the schedule has changed, the schedule may be changed as appropriate according to the progress.

7. Schedule

[1] Guidance
[2] Sensor 1: Acceleration sensor.
[3] Sensor 2: Distance measurement sensor
[4] Production: Manufacture using a sensor
[5] Description of second half, and start the task
[6] Production 1: Product planning
[7] Production 2: Product design
[8] Production 3: Design and fabrication
[9] Production 4: Design and fabrication
[10] Production 5: Design and fabrication
[11] Production 6: Design and fabrication
[12] Production 7: Operation check of the product
[13] Make a presentation
[14] Presentation
[15] Summary and report guidance