

Aerospace training

short-term

research

Syllabus Number

2F309

Special Subjects

Elective 2 credit

MANAKO Hiroyasu

1. Course Description

This lecture aims to learn interesting and importance of research by experiencing research activities early in the laboratory of the Department of Aerospace Engineering. This lecture is PBL (Problem-based Learning) where students can learn the actual research in the aerospace field by thinking about significance and solution method of given issues, setting resolution schedule, and solving the issues by themselves. In this lecture students will research in one desired laboratory. The content of research will be decided in advance after consultation with the teacher in the laboratory.

In the graduation research in the 4th year, it is not decided to be assigned to the laboratory where the research was conducted in this lecture.

2. Course Objectives

- (1) Students acquire skills to solve assignments and learn how to manage schedules.
- (2) Students learn the significance, depth and interesting of research.
- (3) Students learn engineering knowledge in the field through problem solving.
- (4) Students learn how to summarize and present results through the final results presentation.

3. Grading Policy

The daily report is used to confirm that students have performed at least 90 hours of research work. The teacher in charge evaluates the grade based on the final results presentation.

4. Textbook and Reference

Textbook

No text book is used.

Reference

Reference books are prepared in each laboratory.

5. Requirements(Assignments)

Please investigate and study theories and methods for solving the problem independently.

6. Note

The following criteria must be met in order to take the course.

- (1) A minimum of 90 credits valid for graduation at the end of the second grade and two or more required subjects must not be dropped.
- (2) The lecture "Elementary Experiments in Engineering" in the second grade must be completed.
- (3) In advance, the consent of the teacher of the desired laboratory must be obtained.
- (4) In advance, it must be approved by the Department Aerospace Engineering that the course can be taken in consideration of the motivation for research and the availability of research time.
- (5) The number of students may be limited depending on the availability of the desired laboratory.

7. Schedule

Students will receive a lecture about basic knowledge about once a week from the laboratory teacher.

Students will conduct at least 90 hours of research work on the given issues. The research work time includes the lecture time mentioned above.