

Study of Modern Aviation Industry, Part1

Syllabus Number

8D313

Major Course: Basic

Elective 2 credit

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1. Course Description

The lecturer will be given by persons involved in companies related to the aircraft industry in Tochigi Prefecture, and students will receive the actual matters and issues surrounding the aircraft industry, the distinctive technologies of the aircraft industry and production and manufacturing technologies. In this course, you will acquire basic knowledge about DP1.

2. Course Objectives

The goal is to learn about the aviation industry's "real" knowledge that can be used on site by learning about the matters related to aviation development and manufacturing in a wide range with actual aircraft development.

3. Grading Policy

Discussions will be made as a summary for each lecture theme, and report will be required as appropriate. The grade is evaluated by these contents. The score ratio for about 4 reports is 25% each. The report is checked by each instructor.

4. Textbook and Reference

Textbook

There is no specific textbooks. Each lecturer will make recommendations on the documents, etc. that should be referred to in relation to the content of the lecture.

5. Requirements(Assignments)

This lecture is conducted by inviting a lecturer from outside, so the contents and the order of the lecture may change depending on the circumstances. Please note that these changes will be posted accordingly.

6. Note

7. Schedule

- [1] Aircraft development (1); Future direction of aircraft development, joint development with foreign countries, etc.
- [2] Aircraft development (2); continuation of the first lecture
- [3] Aircraft development (3); Summary of the first and the second lectures
- [4] Basic technology and development of the aircraft industry (1); Technologies to support the bottom of aircraft development
- [5] Basic technology and development of aircraft industry (2); Spin-off of aircraft technology, etc.
- [6] Basic technology and development of the aircraft industry (3); Summary and discussion on themes of lectures
- [7] Quality assurance of aircraft manufacturing (1); Quality control, inspection and quality assurance system in aircraft manufacturing
- [8] Quality assurance of aircraft manufacturing (2); Practice of quality control in the manufacturing process
- [9] Special features of aircraft manufacturing (1); Special processes in aircraft manufacturing (machining of titanium etc.)
- [10] Special features of aircraft manufacturing (2); Special processes in aircraft manufacturing (surface treatment etc.)
- [11] Special feature of aircraft manufacturing (3); Present state and future of composite structure
- [12] Summary of aircraft manufacturing; summary and discussion of the 7th to 11th
- [13] Current state and future of helicopter operation (1); Topics on domestic helicopter operation business
- [14] Current status and future of helicopter operation (2); Report on future issues of domestic helicopter operation business
- [15] Summary and issues; mainly reports on issues concerning the aviation industry