

Method of Engineering Education1

Syllabus Number

9F306

Teacher Licence
Subjects Requisites
2 credit

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1. Course Description

Students understand the content of high school education and engineering education, and learn industrial technology education in line with the times.

Desirable teaching methods of each engineering subject, qualification acquisition and an extraordinary activity are discussed and announced by groups. This lesson is related to DP3.

2. Course Objectives

Students learn about, such as the significance of the curriculum, teaching methods of each subject and teaching of special activities in engineering education. The aim is to develop the ability and a practical attitude to solve the problems of engineering education.

The objectives of the students in this lesson are to be able to follow: (1) Understanding the significance of educational curriculum and organization method (2) Teaching method of each subject and devising teaching method of special activities (3) Utilization of information equipment and teaching materials

3. Grading Policy

Students will be evaluated at 60% regular report and 40% report only if all reports are submitted. Feed back and add explanations about points to be corrected when returning the report.

4. Textbook and Reference

Textbook

Nakamura, Shimada, Toyoda, MUnakata Research on Industrial Education Law
Jikyo publication (ISBN 978-4-407-34771-5)

5. Requirements (Assignments)

From the usual, please read news on education

6. Note

7. Schedule

- [1] Planing of preparations to become a faculty member
- [2] Significance, roles and goals of technical high school education: Please prepare the guidelines for teaching
- [3] Points for teaching of industrial subjects and lesson design
- [4] Preparation of learning guidance plan
- [5] Education law (1) fundamental Education Law and School Education Law
- [6] Education law (2) Guidance on learning
- [7] History and current state of technical high school
- [8] Problems of technical high school and transition of graduates' admission rate
- [9] Teaching Methods and Learning Evaluation of technical Subjects (1): Foundations of Industrial Technology and Information Technology
- [10] Teaching Methods and Learning Evaluation of technical Subjects (2): Problem solving research
- [11] Main subjects of industrial course and experimental practice contents
- [12] Internship as an industrial education and qualification acquisition
- [13] Junior Mister Awards and its teaching method
- [14] Contests held in Japan and global contests
- [15] Test, summary