

2140301 Industrial Training Booklet International School of Engineering Faculty of Engineering Chulalongkorn University

Preface

The Faculty of Engineering, Chulalongkorn University realizes the importance of the industrial training, or internship, as a means to provide its students a chance to practice, adapt the knowledge from the classes, be familiar with engineering works and learn how to cooperate with other people long before they graduate and begin their careers. Thus, it has included 2140301 Industrial Training as a required course for all 3rd year undergraduate students.

This booklet describes procedures and guidelines for carrying out an engineering internship in industries. The content includes instructions for registration, report writing and evaluation criteria. Most of the materials are extracted from a Thai edition printed in 2002. Every student should read this booklet thoroughly before starting their training.

Another important consideration is **safety**. Students should strictly follow the safety guidelines of the training organization, especially when working with heavy machines, high voltage equipments and chemical substances.

The Faculty of Engineering has formed an internship committee to oversee the industrial training of students. The internship committee chair will be the head of the course and determine the course grade which will be given as "**satisfied**" or "**unsatisfied**".

Finally, every student should be aware of his/her Chulalongkorn University student status. Good behavioral conduct should be adhered to, since each student will be seen as a representative of Chulalongkorn University.

Chairman of Internship Committee

May 18, 2015

2140301 Industrial Training

1. Course description and objectives

2140301 Industrial Training is a 2-credit course.

Course description: Engineering practice under supervision of experienced engineers in the private sector or a government agency.

Industrial training or internship gives students a chance to experience a real working situation. At the end of the training, students are expected to achieve the following:

- 1. Describe the aspects of engineering works and how engineering works are managed
- 2. Distinguish the roles of engineering in the workplace
- 3. Cooperate with others as a teamwork
- 4. Determine the way to solve engineering problems by applying technical knowledge in practice

2. Registration

A student who registers for the industrial training course must acknowledge the following rules.

- 1. The course only runs during in the summer semester.
- 2. Eligible students must be at least in the 3rd year and have accumulated at least 64 credits at the first semester of that academic year.
- 3. It is not permitted to register any other course concurrently.
- 4. If a student obtained grade I (Incomplete) in any course from the previous semester, he/she needs to resolve the course to formal grades within the first two weeks of the summer semester. Otherwise, it will be automatically converted to grade F.

The registration procedure is as follows.

- 1. Register 2140301 Industrial Training at <u>http://www.reg.chula.ac.th</u>
- 2. Pay the tuition fee for summer session at Chulalongkorn University registrar
- 3. Pay the program fee at ISE office

3. Related documents

At the orientation, each student will receive a set of documents as follows.

- 1. Industrial Training Booklet (which you are reading)
- 2. Official letter from ISE to be given to the organization on the first day of the training.
- 3. Form FIT1: Biweekly reports.
- 4. Form FIT2: Supervisor's evaluation.
- 5. Form FIT3: Information of the training organization and supervisor.
- 6. Instruction of Report Submission
- 7. Summary Report of Industrial Training Evaluation

4. Course requirements and report

The course requirements are as follows.

- 1. Students must attend the orientation organized by ISE before the industrial training.
- 2. Furthermore, the training period must cover at least than 280 working hours and not less than 35 working days and not less than 7 working weeks.

Failure to comply with the requirements will automatically result in a U grade.

Student must fill in Form FIT3 Information of the training organization and supervisor and Form FIT1 Biweekly report.

In Form FIT3, the map of the organization must be drawn to scale and should be clear enough for guiding a visit by the evaluation committee. If the organization is located outside Bangkok, the map should also indicate the distance from Bangkok in kilometers. Make a photocopy of every filled-in form.

Endorsement and due date:

Form FIT3: Information of the training organization and supervisor must be endorsed by the supervisor and sent to ISE within 7 days after starting the training.

Form FIT1: Biweekly reports must be endorsed by the supervisor and sent to ISE every two weeks.

Submission of Form FIT1 and FIT3:

Submit the forms via http://www.ise.eng.chula.ac.th/intranet If students cannot access the webpage, please submit the forms via email ise@chula.ac.th or via the postal mail.

Full report

A full report of industrial training must be typed and printed using white A4 paper. In addition, the information of the training organization (FIT3) and all biweekly reports (FIT1) must be attached with a full report. The full report must be submitted to ISE office at least 7 days before the first semester begins.

The full report must include and be organized as follows.

- **Title page** (see example in the appendix)
- **Abstract**: briefly describe the training organization, summarize the works you have done, and the main outcomes of the training.
- Table of contents
- Chapter 1 Introduction
 - 1.1 Purposes of the industrial training
 - 1.2 Training period and working conditions
 - 1.3 Supervisors and trainers
- Chapter 2 About Training Organization (with permission from the supervisor)
 - 2.1 Location
 - 2.2 Organization profile
 - 2.3 Management system in the organization

• Chapter 3 Details of Work

- 3.1 Types of work
- 3.2 Details of work and duration in each step of the training

• Chapter 4 Conclusions

- 4.1 Benefits of training
- 4.2 Problems and suggestions
- References
- Appendices
 - Copy of Form FIT3 Information of training organization and supervisor
 - Copy of Form FIT1 Biweekly reports
 - Related technical information of the training (to be included in the report only when student receives supervisor's permission)

5. Supervisor's evaluation

Form FIT2: Supervisor's evaluation form is given to the supervisor for a confidential evaluation. Students should inform their supervisor to send the evaluation form via email to <u>ise@chula.ac.th</u> as soon as the training is completed.

6. Grading

Grading is based on a total score of 100 divided into 3 parts as follows.

- 1. The information of the training organization and supervisor (FIT3) 10 points.
- 2. The report score 50 points consist of
 - 2.1 Biweekly reports (FIT 1) 10 points
 - 2.2 Full report 40 points
 - o Statement of purpose, abstract, and introduction 10 points
 - Clarity of training details 10 points
 - Report organization and sentence structure 10 points
 - Documentation (References and Appendices) and formatting 10 points
- 3. Supervisor's evaluation (FIT 2) 40 points.

The course grade is S (satisfied) or U (unsatisfied). An S grade is given to student whose score is at least 60 points. Otherwise, the student will receive a U grade.

7. Contact address

Attention: Industrial Training Coordinator

International School of Engineering, Faculty of Engineering, Chulalongkorn University, Phayathai Road, Pathumwan, Bangkok 10330 Thailand

Email: <u>ise@chula.ac.th</u> Tel. +66 (0)22186422-4 Fax. +66 (0)22186422