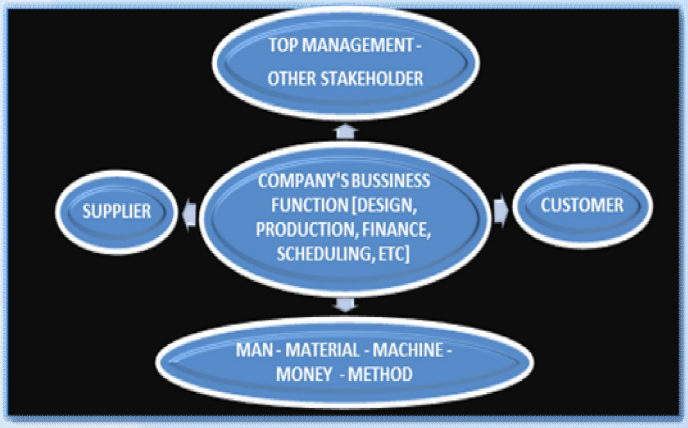
ON THE JOB TRAINING GUIDELINES

11. COURSE DESCRIPTION AND GOALS

A preparation of prospective graduates to face the real work world with the mastery of knowledge in engineering and other skills are always attempted to be better from time to time. In order to prepare the graduates from Industrial Engineering Department who is not only ready to be worked but also ready to be developed, so various attempts are made to introduce the real problem in the industry to students. One of the introduction methods is Internship activities.

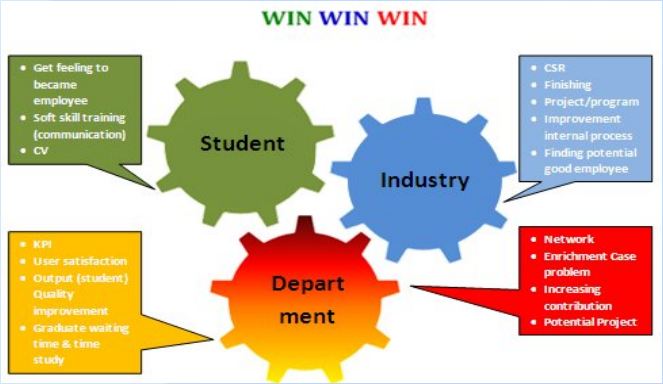
Industrial on the job training is a tool for providing work experience to students, as well as Department of Industrial Engineering to understand the Organization's environment in industry with the existing problems. Industrial on the job training activities would be accomplished with support between Company Partners and internal supervisor from staff in Industrial Engineering Department. In a certain period of time, students take the internship at Company Partners to understand the strategic and the operational activities as well as converting all activities into a comprehensive frame of an Industrial Engineering scientific. Strategic and operational activities (various business functions of the company) are shown in a picture below:



Company Partner where it is a place for an internship is expected to have (as closed as and as complete as) the fourth dimensional focus the company's business functions. Students are expected to find, understand, and explain the efforts to balance activities both in the vertical alignment of the top management (including other stakeholders) to a variety of resources and in the horizontal alignment from customer to supplier.

On the job training/co-op (Co Operative Academic Education) is a form of non-conventional learning which gives the opportunity for students to complete a job or project that are given by the company. There are a number of related parties such as students, industry/company, and Industrial Engineering Department. The implementation of the Industrial on the job training are expected to provide benefits for the company partner which can interact with the teaching staff to share knowledge and experiences, build relationships with students as potential labor candidates and establish potential co-operation activities specifically to reach the sustainable research.

Furthermore, an internship is a practice which gives a real learning process provided by the company experts. An internship is also one of the techniques “on the job training” with practical methods, where someone is trained on a particular/new job with directly from the company experts. The activities in this internship are designed to be an activity that brings benefits to all parties in a relation pattern of Win-Win-Win solution. The pattern of the relationship can be described in Figure 1 as follows:



From the figure of a relation pattern of Win-Win-Win solution on the internship activities above, it shows that the key point of success of these activities requires cooperation from third parties in order to make the good activity and beneficial for each party.

12. COMPETENCY TARGETS

After taking Industrial on the job training, students are expected to have the following abilities:

1. KU1,KP1,KP2,KP3 → Identify the company's business functions that associated with customer
2. KU1,KP1,KP2,KP3 → Identify the company's business functions that associated with various resources (man-material-machine-money-method)
3. KU1,KP1,KP2,KP3 → Identify the company's business functions that associated with supplier
4. KU1,KP1,KP2,KP3 → Identify the company's business functions that associated with top management or another stakeholder
5. KU1,KP1,KP2,KP3 → Identify the vertical alignment process (from top management/other stakeholder until the various resources) and the horizontal alignment process (from customer until supplier)
6. KU1,KU2,KP1,KP2,KP3 → Formulate the connection of various business functions with the specific task of companies (company project) into the overall strategic and operational activity of the company
7. KU1,KU2,KU4,KP1,KP2,KP3,KL1,KL2 → Interpret the whole activity of the company following with the specific task of companies (company project) that related with Industrial Engineering science framework.

The overall targets of these competencies are aligned with the expected competencies that attached with Industrial Engineering students, based on 2009-2014 Curriculum.

- Core Competencies
  - Analytical skill
  - Synthesizing, integrating, and designing skill
  - Managerial skill
  - Problem solving skill
- Supplementary Competencies

- Intrapersonal and communication skill
- Proficiency in ICT
- Proficiency in English and or other language

➢ Other Competencies

- Ability to accommodate environmental issues and sustainability
- Innovation skill

13. LEARNING METHODS

Learning methods that used in this Industrial On the job trainingcourse are (not limited to) as follows:

1. Participation in company activity (doing work)
2. Listening the lecturer from the speaker (especially company supervisor)
3. Doing the discussion with company supervisor and lecturer as an internal supervisor from Industrial Engineering Department
4. Specific assignment through literature review and make the report

14. MATERIALS

The material covered in this Industrial On the job trainingcourses are as follows:

1. 1st Material – Introduction to the various activities of the company (related to the business functions) that associated with the customer – 1st Competency targets
2. 2nd Material – Introduction to the various activities of the company (related to the business functions) that associated with the various resources (man-material-machine-money-method) – 2nd Competency targets
3. 3rd Material – Introduction to the various activities of the company (related to the business functions) that associated with the supplier – 3rd Competency targets
4. 4th Material – Introduction to the various activities of the company (related to the business functions) that associated with the top management – 4th Competency targets
5. 5th Material – Introduction to the vertical and horizontal alignment within the company's activity – 5th Competency targets
6. 6th Material – Discussion and literature review about scientific of the Industrial Engineering, such as research term – scope – work program (project) in company

with references that have been obtained in other courses – 6th and 7th Competency targets

15. PREREQUISITES

Here are the prerequisites for students who take this elective course at the time of the submission:

a. Registered as an active student of Industrial Engineering ITS
b. Have passed Industrial System Design course
c. Have passed 130 credits
d. Understand and are willing to obey various regulations that applicable to activities of the Company Partner

16. LEARNING IMPLEMENTATION PIC

Here is the person-in-charge for the Learning Implementation in Industrial On the job trainingcourse:

1. Head of Industrial On the job trainingcourse – Industrial Engineering Department [responsible the the substance and administrative, include equivalency between time duration with credits course]
2. Internship Administrative Staff – Student Service Center [responsible to the administrative]
3. Internal Supervisor (2 person) – Lecturers from Industrial Engineering Department that appointed to redirect and monitor the activities of student internship [responsible to the substance]
4. Company Supervisor – one (or any) company staff that appointed to redirect and monitor the activities of student internship [responsible to the substance and administrative]

17. LEARNING IMPLEMENTATION PROCEDURE

The implementation of this Industrial On the job trainingas an elective course is specific (not same with other elective courses), this elective course could replace one from five election courses that became one of the last priority laboratory.

a. SUBMISSION AND ACCEPTANCE

- Students read/receive announcement/internship offer
- Students fill out A Form as the registration of the Industrial On the job trainingas an elective courses (including the statement of understanding the rules in internship, statements taken simultaneously with Internship and or final project or not, and the statement has met all the prerequisites that require as well as the enclosed with the curriculum vitae)
- Internship administrative staff in Student Service Center will check all the prerequisites and verify the statements with Academic information system
- After Form A verified and signed by Head of Internship Course, cover letter for company partner will be produced
- Participants of the internship will have some tests (if any/necessary)
- Letter of acceptance of Internship from the company must immediately submited (if possible on the same day or the next day after students have accepted) to the internship administrative staff, unless the company will send directly to the Industrial Engineering Department.

b. THE INDUSTRIAL ON THE JOB TRAINING

- Students fill out Form B and signed by Company Supervisor
- Students fill out Form C and signed by two Internal Supervisor (can be done before leaving for internship). In asking for an internship, students must explaining the plan activities in internship and the intended industry overview for further discussion has been prefaced with sufficient information
- In every week, student participants in internship must submit the daily activity report, as well as the draft of progress report via e-mail or registered mail (print-out of this communication must be attached in the report). If necessary, the internal supervisor will provide feedback for improvements/refinements of the substance
- Specified time period in company, students apprentice participant is obliged to submit the same report to the company supervisor as well as conducting the necessary discussions
- Students conducted a presentation according to the evaluation mechanism that delivered in the evaluation plan in this guidance

- Students make a report according to the format of report writing in this guidance
- Students fill out Form D and asked for approval/validation to the company supervisor (include with the name and the position of the supervisor)
- Company supervisor will provide the score after all the evaluation process is completed, and return the Form E which filled out with the score in a closed envelope (can leave it to students or directly sent to the Industrial Engineering department)
- Internal Supervisor will provide the score after all the evaluation process is completed, and return the Form F (Supervisor I) or Form G (Supervisor II) which have been filled out with score and submitted to apprentice administration staff in Student Service Center

c. COMPLETION OR RESIGNATION

- Students must submit all the requested report (see section format of report writing in this guidance) to each party as well as filling the Form H and collect the signature on the receipt
- After the form H already full filled, submitted the form to internship administrative staff in student service center
- Internship administrative staff will recap the entire administrative file and provide the recap score to head of the internship course for approval and inserted in the Academic information system.
- Student may resign by written statement that containing of the reasons for resignation accompanied with the written data of evidence (if necessary) to the company and to the Industrial Engineering Department (in this case to head of the Internships). At the same time with the resignation, score of the internship will be cancelled and the Industrial On the job trainingcourse as an elective course can drop from FRS. The Drop can only be made after obtaining the approval from the company and the head of internship course about the resignation.

18. WEEKLY PLAN (PER MEETING)

The elective courses, Industrial On the job training course is equal to three credits which can define with as follows:

- 150 minutes in every week for an interview/observation/do the job with the company partners
- 300 minutes in every week for search the relevant references and linked to the results of the interview/observation/do the work
- 300 minutes in every week for make the analysis and report independently

Here are the details of the plan of learning per week (or customized)

No.	Material	Week	Total Time Face to Face*
1.	1st Material	From 1 until 3	1.125 minutes (18,75 hours) or 6,25 hours per week
2.	2nd Material	From 4 until 6	1.125 minutes (18,75 hours) or 6,25 hours per week
3.	3rd Material	From 7 until 9	1.125 minutes (18,75 hours) or 6,25 hours per week
4.	4th Material	From 10 until 12	1.125 minutes (18,75 hours) or 6,25 hours per week
5.	5th Material	From 13 until 15	1.125 minutes (18,75 hours) or 6,25 hours per week
6.	6th Material	From 16 until 18	1.125 minutes (18,75 hours) or 6,25 hours per week

* because of these activities will be held outside Industrial Engineering department, then 75% of the time independent structured activities (reference searches relevant) allocated on face-to-face activities

19. EVALUATION PLAN

Assessment of Industrial On the job trainingcourses are specialized, with fixed attention at least 4 types of learning evaluation.

Evaluation	Evaluation Type	Weighted Score	Held On
1.	Report Presentation – in Company Partner – 1st Material	5%	Week 3
2.	Report Presentation – in Company Partner – 2nd Material	5%	Week 6

3.	Report Presentation – in Company Partner – 3rd Material	5%	Week 9
4.	Report Presentation – with Internal Supervisor – from 1st until 3rd Material	20%	Week 9
5.	Report Presentation – in Company Partner – 4th Material	5%	Week 12
6.	Report Presentation – in Company Partner – from 5th until 6th Material	30%	Week 15
7.	Report Presentation – with Internal Supervisor – from 4th until 6th Material	30%	Week 18

The proportion scores from the company partner are 50% and 50% from internal supervisor (so the total score is 100%). Another note is that evaluation should be conducted during the period of internship.

The score of Internship directly applicable on the ongoing semester or the next semester (directly), with term student must register it on the FRS. The guideline for period provisions is the end of the internship (the last meeting with internal supervisor - 8th evaluation). It does not exceed the time limit to deliver the examinations score according to academic calendar. If not so, then the score is declared forfeited.

The similarity of the material (such as the similarity of one sentence) with reports of internship or final project taken concurrently may affect to the reduction score up to E score for Industrial On the job trainingcourse.

20. REPORT WRITING FORMAT

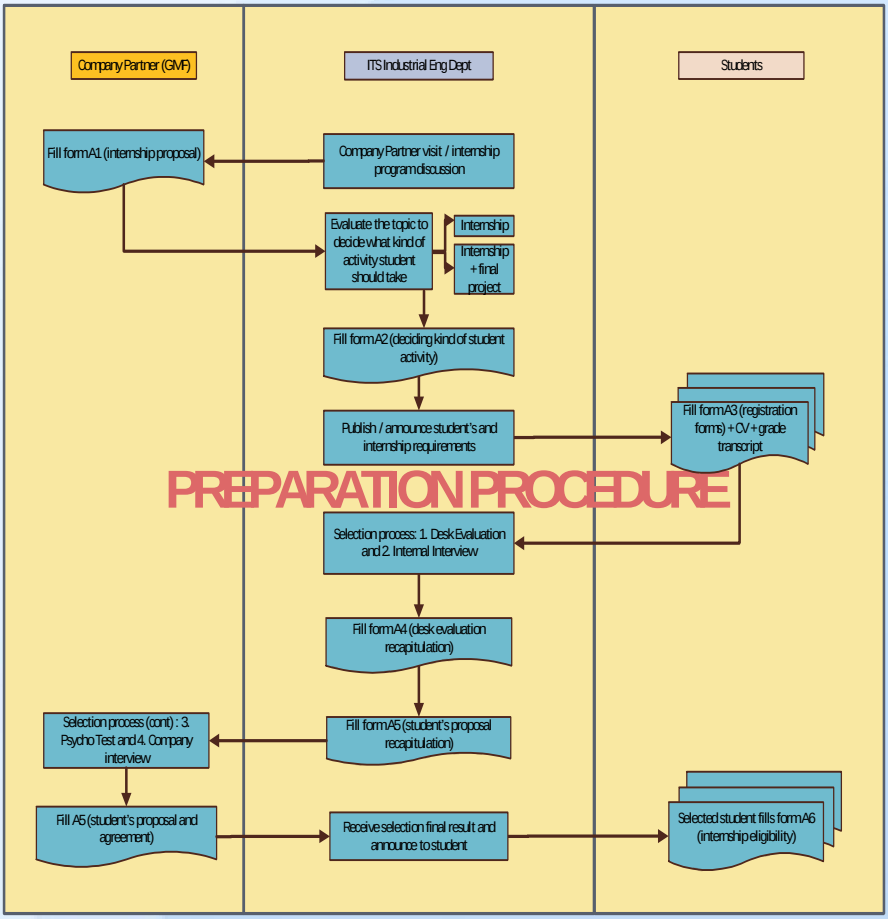
The format of report writing that used in the evaluation of Industrial On the job trainingcourse are similar to the rules of writing the scientific report in General, with the content/sequences and some special rules as follows.

- The beginning section of the report which is in different part are contain as follows:
    - Cover
    - Letter of acceptance from the supervisor
    - Table of Content
    - List of Figure
    - List of Table

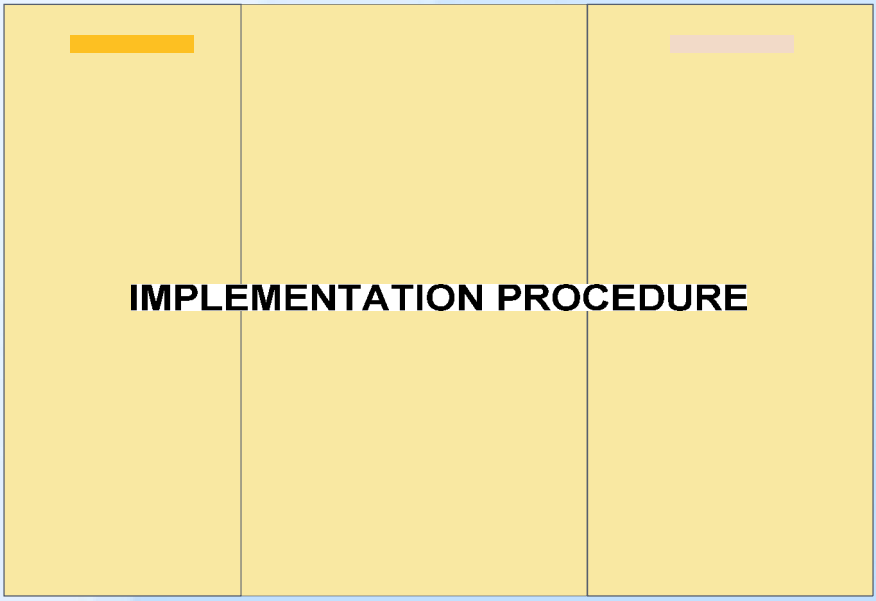
- The report material writing is in the form as Paragraph like article in seminar or journal (it is not in different section)
  I. ABSTRACT (maximum 150 words that contain the basic goal of the analysis, the principal issue raised, the methods used and the results of the analysis of the findings/research)
  II. INTRODUCTION (min. 300 word that consists of background, a minimum of 300 words containing background, basic problems raised, scope, assumptions if any, as well as for the sequences of the material for example. ...This report begins with.... then will be discussed... Finally,. ....)
  III. LITERATURE REVIEW (minimum 500 words which contains a study of the literature which is relevant to the material covered, can be written specifically referenced from the chosen courses tittle)
  IV. COLLECTION and PROCESSING of DATA (contains a summary of the data collection, the principal calculations or the process to make a chart which referenced in the analysis)
  V. ANALYSIS AND INTERPRETATION (contains of the findings/results of the analysis of the acquired data processing and interpretation of the linkage of making report with the pattern of findings/results analysis report from related material covered
  VI. CONCLUSION and RECOMMENDATION (contains of the summary from findings/results of the analysis as well as the answer to the main problem to be appointed, followed by recommendations for research/creation of subsequent reports)
  VII. BIBLIOGRAPHY
- The end section of the report are contains of ATTACHMENTS (various supporting data that are necessary, including log book and internship contract/letter assignment)
- Reports written on A4 paper size, Font Calibri 11, 1 line spacing with margins 3 cm-2 cm-2 cm-2 cm (left-right-up-down)
- All existing reports (6 pieces) must be bound to 1 at the end of industrial apprentice process, make some copies of it, 4 pieces bound with soft cover for the company, 2 pieces for internal supervisor and one for Industrial Engineering library accompanied by CD (soft copy, to accommodate photo files that might be too much if it has been printed)

Attachment Procedures:

1. Preparation Procedure



2. Implementation Procedure



3. Evaluation Procedure