

# TECHNICAL INTERNSHIP 1 PRINCIPLES

These internship principles are prepared for Industrial Engineering Department Technical Internship 1 based on <u>YÖ-006-YTU Undergraduate Education Internship Application</u>

<u>Directive</u> and <u>Mechanical Engineering Internship Regulation</u>

## Definition, Subject and Duration

Technical Internship 1 (if possible) should be done in the IT departments of the firms or Information Technology (IT) companies. Industrial Engineer must be employed in the internship organization; however, it does not have to be in charge of IT department. The IT department must have employees who have studied in different disciplines. It is the responsibility of the student to find the place of internship.

The following subjects fall within the scope of Technical Internship 1:

- Network setup and management
- System installation
- Database preparation
- Hardware operations
- Web design
- Human-computer interaction
- Program software
- Network and information security etc.

Duration of Technical Internship 1 is 20 working days. The rules specified in <u>YÖ-006-YTU</u> <u>Undergraduate Education Internship Application Directive</u> and <u>Mechanical Engineering</u> <u>Internship Regulation</u> are taken as basis in order to determine the internship dates and the realization of the internship

## Internship Activities

"Internship Record Form" and "Internship Book" which signed by the official of the internship place, stamped and put in a sealed envelope must be submitted to the Internship Office of the Faculty of Mechanical Engineering within 1 (one) month after the completion of the internship according to article 4.7 of <a href="YÖ-006-YTU Undergraduate Education Internship Application Directive">YÖ-006-YTU Undergraduate Education Internship Application Directive</a>. The internship book that is not submitted within 1 month after the completion of the internship is not taken into consideration and the internship is rejected as specified in the Internship Regulation of the Faculty of Mechanical Engineering.



Yildiz Technical University
Faculty of Mechanical Engineering
Industrial Engineering Department
Technical Internship 1 Principles

# **Evaluation of Internship**

Internship Registration Form and Internship Book are examined by Department Internship Commissions and internship studies are evaluated according to <u>YÖ-006-YTU Undergraduate Education Internship Application Directive</u>. The result of the evaluation can be acceptance, correction or rejection.

## Rejection of the Internship

Internship book is rejected under the following conditions:

- 1. The student does not submit the internship registration form and the internship book within 1 (one) month from the end of the internship.
- 2. Preparation of the internship book incompatible with the principles of Industrial Engineering Technical Internship 1 Principles.
- 3. Internship book content is less than 50% compliance with Industrial Engineering Technical Internship 1 Principles.
- 4. In case the applications presented in the internship book are not original
- 5. Not receiving the corrected internship book 7 (seven) working days from the date of notification to the student.
- 6. If the corrected internship book is not submitted to the commission within 1 (one) month after receipt.

Students who have been rejected an internship in Technical Internship 1 will be informed in writing by the Department of Industrial Engineering. The rejected internship is repeated and the new internship is subject to the rules stated in these principles.

The student whose internship has been rejected may appeal to the Department of Industrial Engineering within 1 (one) week following the notification according to Article 5.8 of YTU Undergraduate Education Internship Application Directive. Internship Registration Form and Internship Book are re-evaluated by Technical Internship 1 commission and the result is reported to the department.

## Correcting the Internship

Internship should be corrected under the following conditions:

- 1. Internship book content is less than 70% compliance with Industrial Engineering Technical Internship 1 Principles
- 2. Inadequate number or inadequate content of applications that the student presents in the internship book.
- 3. Lack of stamp and signature of the official of the institution in the internship registration form and internship book.
- 4. In the case of internship book is not regular.

The student who needs correction in the internship book is notified in writing by the Professional Area 1 internship commission via e-mail. The internship book must be received



## Yıldız Technical University Faculty of Mechanical Engineering Industrial Engineering Department Technical Internship 1 Principles

within 7 (seven) business days from the date of this notification. The student who needs correction in the internship book must make the required correction within 1 (month) and submit the corrected book to the Technical Internship 1 commission. The internship of the student who does not receive his / her notebook from commission or not delivered to the commission within the specified periods is rejected.

## Acceptance of Internship

Internshipis accepted under the following conditions:

1. Preparation of the internship book compatible with the principles of Industrial Engineering Technical Internship 1 Principles.

Internships which eligible for accept are evaluated at the Professional Field 1 internship committee meeting and accepted by majority vote. It is delivered to the Department of Industrial Engineering within 1 (one) week following the commission meeting. The accepted internship is not notified to the student separately, it is recorded in the transcript of the student.

## Internship Principles

Students who are going to do their Technical Internship 1 must prepare their internship book according to the following principles:

- 1. Internship report should not exceed 40 pages. If the number of pages in the internship book is insufficient, a blank page of the internship book can be copied and copied to the end of the book.
- 2. Part, work done, page no and date fields at the top of the page should be filled in completely.
- 3. The check result area in the footer information on each page of the internship book should be stamped and signed by the authorized person of the internship institution.
- 4. No additional documents should be added except *internship record form* and *internship submission form*.
- 5. The entry page of the internship book must be completely filled in and stamped and signed by the institution official after the *evaluation field* is completed.
- 6. The weekly work schedules of the internship book should be filled in full in accordance with the internship dates.
- 7. Part, total hours, workplace and part, the title of the inspector, surname and name of the inspector which are the footer of each completed weekly plan; must be completely filled in.
- 8. Each weekly plan must be signed by the authority of the institution.



#### Yıldız Technical University Faculty of Mechanical Engineering Industrial Engineering Department Technical Internship 1 Principles

## Rules of Internship and Report

The Internship Book Checklist document should be printed out and entered into the internship book in the order given. For each item in the Internship Book Checklist, the page of the internship book must be written by the student. This document should be stapled into the back cover of the internship book.

Internship book should not contain book information, theoretical information, user manual, general information about the program or software used (date of establishment, location of software company, description of software, etc.). All reported information should be directly related to the place of internship.

The issues that need to be considered in the Technical Internship 1 and preparation of the internship book are as follows.

- 1. Introductory brief information should be given about the company.
  - a. <u>Internship Introduction Form</u> is completed online. After completing the form, the student will be sent an e-mail with the internship place. After the form is completed, the form is sent to the student by e-mail. This document is stamped and signed by the institution official and the student is pasted to the inside of the front cover of the internship book.
  - b. The work done by Industrial Engineers should be summarized in general.
- 2. The student is required to take an active role in at least one of the areas in which the trainee participates actively in the internship form. One of the selected areas should be reported in detail. If more than one selection has been made, should be summarized in no more than two paragraphs.
- 3. Information should be given about the general use of Information Technologies of the firm.
  - a. Information should be given about the usage areas of computer, tablet etc. information technologies used in the firm.
  - b. Information about where operating systems are used and why they are preferred this system should be given.
  - The communication system used in the firm should be introduced and how the meeting plans, agenda management, document management, etc. should be explained
- 4. The IT department of the firm should be examined.
  - a. Information should be given about the organization of the IT department and the organization chart should be drawn.
  - b. The education and expertise of the IT staff should be examined.
- 5. The support of IT activities to the management process should be examined.
  - a. Explain how management decisions and planning affect the IT department's decision and planning (IT decisions taken for maintain business operations, etc.)



#### Yildiz Technical University Faculty of Mechanical Engineering Industrial Engineering Department Technical Internship 1 Principles

- b. Explain how the IT department's decision and planning supports management decisions and planning.
- c. Information security processes should be examined.
- d. Information processing activities supporting strategic, tactical and operational decisions should be specified.
- 6. The software used in firm must be introduced.
  - a. The ERP system specified in the <u>Internship Introduction Form</u> should be introduced.
    - i. Which departments use which modules?
    - ii. How does the ERP system affect business processes?
    - iii. Is ERP used effectively?
  - b. A process should be introduced and mapping should be performed (SysML, BPMN, ...) using a system management software.
  - c. Software development process should be examined.
    - i. Why software development process (waterfall, agile, code & fix etc.) is preferred should be examined.
    - ii. An example of the implementation of the software development process should be given.
- 7. The relationship between the programs used in firm and the firm activities should be examined.
  - a. The following questions should be answered about each selected topic in the internship site introduction form:
    - i. What is the program used in the relevant activity?
    - ii. What is the effect of the program used on business processes?
    - iii. Is the program used sufficient?
    - iv. Is the program being used effectively?
  - b. The points that can be developed in the relation between the related activity and the program should be identified and suggestions should be made on how to make improvements.

#### 8. Applications

- a. Total of 5 applications should be prepared within the scope of the issues examined in Article 7.
- b. 2 applications should be prepared using ERP software.
- c. 3 applications must be prepared *using the other programs and software* in <u>Internship Introduction Form</u>.
- d. All applications must have at least 3 steps and be supported with screenshots.
- e. If applications made using other programs and software include analysis, the information resulting from these analyzes should be synthesized and interpreted.



### Yıldız Technical University Faculty of Mechanical Engineering Industrial Engineering Department Technical Internship 1 Principles

- f. Applications should be advanced. (Login, PowerPoint presentation, data input to Excel, graphics creation in Excel, etc. applications are not accepted.)
- g. In the case of internship firm does not want to share information, data or screenshots;
  - i. Confidential information can be turned off in screenshots.
  - ii. Applications can be made without the use of confidential information. The important thing is to prove that the student is able to use the programs.
  - iii. Applications can be made by using open source data or similar open source programs. In this case, these programs should be indicated in the Internship Introduction Form.

#### 9. Results and evaluation

- a. Firm must be evaluated.
  - i. The student should evaluate the use and effectiveness of general information technologies in the enterprise during the internship period.
  - ii. The issues that can be improved and improved should be indicated and suggestions should be made.
- b. The student should evaluate himself / herself.