



TECHNICAL INTERNSHIP 1 PRINCIPLES

These internship principles are prepared for the Industrial Engineering Department Technical Internship 1 based on **YTU Internship Directive** and **Mechanical Engineering Internship Regulation**.

Definition, Subject and Duration

Technical Internship 1 must be completed in the Information Technology (IT) departments of service or manufacturing organizations (preferably large ones) or at companies where the core service is IT. The organization where the internship takes place must employ an Industrial Engineer; however, this engineer need not work specifically within the IT department. The IT department must employ staff from diverse academic backgrounds. The workplace supervisor responsible for signing and reviewing the student's submitted documents must be an engineer. The student is responsible for securing the internship placement.

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

- Big Data Analysis
- Robotic Process Automation
- Machine Learning and Artificial Intelligence Applications
- 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 *YTU Internship Directive* and *Mechanical Engineering Internship Regulation* are taken as the basis in order to determine the internship dates and the realization of the internship.

Submission of Internship Book

Internship books must be submitted via email to the Technical Internship 1 Commission (endstajma1@gmail.com). Submissions in person are not accepted. Students must complete the FR1816 Industrial Engineering Internship Book in Word format. Additionally, the documents listed below must be combined and submitted as a single PDF file.

- FR-1861 Department of Industrial Engineering Internship Registration Form
- FR-1813 Department of Industrial Engineering Approval Form of the Book
- FR-1814 Department of Industrial Engineering Internship Submission Form
- FR-0952 Faculty of Mechanic Department of Industrial Engineering Employer Survey



Evaluation of Internship

Internship activities are evaluated by the Department Internship Commissions in accordance with the YTU Internship Directive through the review of submitted documents. The outcome of the evaluation is acceptance, a request for corrections, 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. If the corrected internship book is not submitted to the commission within 1 (one) month after receipt.
6. The inadequate number of applications presented in the student's internship book.
7. If the Turnitin similarity rate exceeds 25% after revisions.

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 Internship Directive. Internship Registration Form and Internship Book are re-evaluated by Technical Internship 1 commission and the result is reported to the department.

Revising the Internship

Internship should be revised under the following conditions:

1. Internship book content is less than 70% compliance with Industrial Engineering Technical Internship 1 Principles
2. Inadequate content of applications that the student presents in the internship book.
3. Lack of **stamp and (ink) 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.
5. If the Turnitin similarity rate exceeds 25%.

The student who needs correction in the internship book is notified in writing by the Technical 1 internship commission via e-mail. The student who needs revision in the internship book must make the required revision within 1 (month) and submit the revised book to the



Technical Internship 1 commission. The internship of the student who does not receive their book from commission or not delivered to the commission within the specified periods is rejected.

Acceptance of Internship

Internship is accepted under the following conditions:

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

Internships which are eligible for acceptance are evaluated at the Technical internship 1 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. The internship book should not exceed 40 pages.
2. The evaluation section on the internship book's title page must be fully completed by the institution's authorized representative.
3. 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.
4. The footer section of each completed weekly schedule, including total hours, the workplace and department, the reviewer's title, the reviewer's full name, and the diploma number—must be filled out completely.

Rules of Internship and Book

The issues to be considered regarding the completion of Technical Internship 1 and the filling out of the internship logbook are provided below.

1. Introductory brief information should be given about the company.
 - a. [Internship Introduction Form](#) is completed online. 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 added to the first page 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, it 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 provided regarding where the operating systems used in the enterprise are deployed and why they were chosen.
 - b. The communication system used within the enterprise should be described, and the procedures for meeting planning, agenda management, and similar activities should be explained.
 - c. The implementation of document management and document security within the enterprise should be explained.
 - d. The artificial intelligence systems utilized by the enterprise and their areas of application should be outlined.
 - e. The use of artificial intelligence systems should be examined from the perspective of information security and evaluated within the framework of ethical guidelines.
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.)
 - b. Explain how the IT department's decision and planning supports management decisions and planning.
 - c. Information security processes should be examined.
6. The software used in the firm must be introduced.
 - a. The ERP system specified in the [Internship Introduction Form](#) 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 must be introduced and **mapping activities carried out using system management software** (SysML,BPMN, ...).
 - c. The software development process should be examined.
 - i. Why software development processes (waterfall, agile, code & fix etc.) are 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. A total of 5 applications must be prepared.
 - b. 2 applications must be prepared using ERP software.
 - c. 3 applications must be prepared using the other programs and software in the **Internship Introduction Form**.
 - d. All applications must have at least 3 steps and be supported with screenshots (Actions such as logging into a program or opening the relevant tab are not considered steps).
 - e. If applications made using other programs and software include analysis, the information resulting from these analyzes should be synthesized and interpreted.
 - f. Applications should be **advanced**. (Login, PowerPoint presentation, data input to Excel, graphics creation in Excel, etc. applications are not accepted. Comprehensive work, such as software development, coding, and advanced Excel applications, is expected.)
 - 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. The firm must be evaluated.
 - i. The student must 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.