

**KONYA FOOD AND AGRICULTURE UNIVERSITY**

**FACULTY OF ENGINEERING AND ARCHITECTURE**

**INDUSTRIAL ENGINEERING DEPARMENT**

**IENG 2000**

**SUMMER INTERNSHIP  
REPORT**

**Name Last Name**

**ID Number**

**Performed at**

**Name of the Firm**

**Beginning and End dates**

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**Abstract**

You should provide a short (no more than 150 words) abstract in your report. This abstract should describe your internship in a few sentences: mainly stating where, what you have done and what you learned. Just a general description.

# INTRODUCTION

To use the template, create an empty version of this document (just by double clicking the dot file) and edit the text according to your internship. You should be using relevant styles defined in this template. For example you should use H1 for top-level Section headers and TEXT style for the normal text.

In the introduction section you should make a smooth beginning to the document. This section should include the following information:

* The name of the company and department where you have done your summer internship, the main focus area of the company, and your motivation for choosing this company as the place for your summer internship.
* Brief summary of the work you have done, the motivation behind it, and the significance of the work that you have done in the overall project.
* Explanation of the organization of the rest of the report.

# INTRODUCTION OF THE COMPANY

Have a section providing detailed information about the company and department where you performed your internship, its hardware/software systems and resources, its focus and project area, its organization, etc. The name, address, telephone number, email address, and information about the education of your supervisor must be given (including the name of the university and department from which he/she graduated, and the year of graduation). Additionally, you must list the names of your team members and their backgrounds. If you have worked with other interns from for example Industrial Engineering please write this information, as this can be considered as an evidence for multi-disciplinary work.

# ORGANIZATION AND GENERAL PRINCIPLES OF MANAGEMENT

## Role of IE in the Organization of the Company

Discuss the organizational structure of the company referring to the organizational chart (if it is not available, prepare it yourself). How many industrial engineers are employed in the company? For one industrial engineer, provide name, title, duties and his/her responsibilities.

# MANUFACTURING PROCESSES

## Process Descriptions

Explain briefly the types of manufacturing processes (casting, forming, machining, and joining) and process categories (project, job processing, batch or intermittent processing, repetitive and flow processing, continuous) that exist in the plant.

## Machinery Descriptions

List the technical specifications (age, power, capacity, efficiency …) of at least two machines on the shop floor, match the manufacturing processes discussed in the above question.

# ANALYSIS OF PRODUCTION SYSTEMS

## Production Systems

What type(s) of production environments (MTO: make-to-order, MTS: make-to-stock, ATO: assemble-to-order, ETO: engineer-to-order) is (are) observed in the company? Briefly explain.

## Work Study

Choose a productivity measure (labor productivity, capital productivity, materials productivity, etc.) and calculate the productivity for a specific material, machine, process, labor or capital. Then provide suggestions about how to improve this productivity value.

## Methods Study

Prepare a part (or ingredient) list for a product of the company. For a product or a specific part, prepare the operation process chart and an assembly tree.

## Operation Analysis

Choose a workstation with manual work. If there is not such a workstation, choose an office process such as a secretarial job. Draw the work piece(s) and indicate the contents of the bins and the location of tools and materials. Draw the left and right hand operation chart. Try to improve the process, prepare the operation chart for the improved process and compare with the original process.

## Work Measurement

Are there any standard time used for operations (and elements of operations) in the company? If yes, for what purposes are standard times being used? Supply the data for two operations and explain how standard times are calculated. If not determined, which technique might be appropriate for the company? Why? Apply the suggested technique for one operation (that is, collect data, make analysis, and calculate the standard time).

## Cost Analysis

Choose a machine or equipment which is not very close to the end of its economic life. Explain the method used for calculating the depreciation expense for this asset.

## Ergonomics

Discuss the working environment problems: heat (cold), humidity, vibration, noise, illumination, ventilation, colors, etc.

## Safety

What are the special hazards associated with the production in the plant? Are there any special national organizations, rules and regulations associated with the control of these hazards? Explain briefly. What are the precautions applied for safety? Give some examples.

## Job Evaluation

Is job evaluation used in the company? If yes, explain the approach for classifying the jobs. Otherwise, suggest the most suitable method for classifying the jobs?

Select two positions: one blue-collar and one white-collar employee. Give their job descriptions.

## Plant Layout and Material Handling

Draw the company layout (block plan).

Which material handling equipment are used in the company? Explain their usage purposes.

# MAINTENANCE PLANNING

Are there any maintenance activities in the company? Explain. If there is none, comment on the applicability of the maintenance activities in the company.

# AUTOMATION, ADVANCED TECHNOLOGIES AND INFORMATION SYSTEMS

Is there any automation used in the company. Select a manual process and discuss how it could be automated.

Are the advanced technologies used in the company? If yes, explain their usages. If not, comment on how these technologies can be applied in the company.

What types of computer programs and software packages are being used? Make a classification of available computer hardware in the company.

# CONCLUSION

# REFERENCES

# APPENDIX