

**T.C ANKARA UNIVERSITY**

**Faculty of Engineering**

**Department of Energy Engineering**

**Processes & Organizational**

**Internship Report Template**

**Company Name**

Prepared by

Student Number Name Surname

**Starting Date** : Day. Month. Year

**Ending Date** : Day. Month. Year

**ReportDelivery Date** : Day. Month. Year

Approval Date:

Signature

Month Year, ANKARA

Organize your report into these sections:

**ABSTRACT**

Abstract Text, 800-1000 characters.

In this section, you should cover the following items:

* Introduction of Company.
* Describe your working conditions and functions, such as: Who is your supervisor (include his/her name and his/her position); other team members or co-workers and what their functions are to complement yours.
* Schedule of internship.
* Discuss manufacturing technologies used in the company.
* Description of tools and techniques learned.
* Describe what you exactly did there and what experiences you have gained throughout your training.
* Skills learned.

**TABLE OF CONTENTS**

Contents of the report with page numbers, list of tables, and list of figures.

**1. INTRODUCTION**

Describe the company in detail.

* Company Name
* Company Location
* Number and Duties of Engineers Employed
* Organizational Structure of the Company
* Brief History of Company
* Main Area of Business
	+ Working Area of Company
	+ Facilities
	+ Products
* Contributions of the Company in Turkey’s Energy Sector

**2. ENERGY PROCESS AND CONVERSION UNITS**

This is the main body of your report; you should cover the following items:

* Explain the energy generation & conversion units, and give information about what kind of energy conversion they have.
* Explain energy sources.
* Provide a process chart of a major product and/or sub-assembly.
* What kind of manufacturing techniques are used in the organization?Describe Process in the units, operating conditions and basic working principles.
* Provide an overview of the production system (what are the resources, inputs, and constraints)
* What kind of materials are used during the manufacturing process?Give feedstock and product characteristics (physical and chemical features such as boiling point, appearance, state of matter etc.)
* Provide the fabrication route for products, along with manufacturing technologies used.
* How the capacity of production is measured and calculated?

**3. ORGANISATION**

This is the main body of your report; you should cover the following items:

* Give a detailed information about company’s departments (i.e. Human resources, Sales etc.)
* Describe the work flow diagram of the departments mentioned above. Provide their scalar relationships.
* Discuss the company location in terms of the closeness to market place, company's product or service, and transportation vehicles (port, airport, intercity roads etc.).
* Evaluate the materials necessary for production or service (such as accesibility of raw material resources). Evaluate the availability of energy (transformers, dams, etc.) and personnel provision.
* How to conduct market research and demand forecasting studies (questionnaire survey, questionnaire by salespeople, forecasting experts, time series analysis, correlation analysis, market tests)?
* Provide an information about feedstock of the company. Based on which criteria they are selected and their amount is detected.
* Provide an overview of the production system (what are the resources, inputs, and constraints). Provide a work flow diagram of a major product and/or sub-assembly. How the capacity of manufacturing can be determined and calculated? What is the system type (continuous, batch, semi-batch)? Give a detailed explanation.
* Give information and examples about annual production plan, monthly or short term production plan and how materials are loaded to the related unit.
* Describe the quality planning and control activities in the internship organization.Describe the quality control activities throughout the life cycle of the product groups. What kind of tests are performed for quality control and design verification (strength tests, fatigue and durability tests, thermal tests, vibration and noise measurements, performance tests, routine quality control tests, safety tests, etc.)?Show some work samples that you have encountered/conducted at the company through graphs, pictures, data, drawings, or design calculations and include them.

**4.ENGINEERING CALCULATIONS**

* Describe the relevant energy process (conversion, R&D, P&D).
* Give the conditions and assumptions for this described process
* What type of engineering analysis and calculations are performed (material balance, energy balance,aero-dynamic, hydrodynamic, heat transfer calculation,structural analysis, stress calculations, kinematic, fatigue life calculations, control algorithms, thermal analysis etc.)?
* Do the energy calculations through the each relevant process.
* Discuss the possible energy/system efficiency lossesthrough the processes (i.e. insulation problems, friction losses etc.)
* Show your results in table(s).
* Do a comparison between theory and practice. Discuss whether they are very close to each other or not.

**NOTE:** The ones who make process internship should make the above calculations on the company’s research topic and should explain the tools used for these calculations.

**5. CONCLUSION**

This section should include the below information and following questions.

* A summary of key conclusions derived from the internship experience. What kind of responsibilities you have undertaken during the internship period?
* What skills and qualifications you think that you have gained from the internship?
* How do you think the internship activities that you carried out contribute in yourtheoretical and experimental knowledge?
* General observations about the sector in which your internship company/institution operates. Do you think it will influence your future business life or career plans?
* A summary of the process and engineering calculations.

**REFERENCES**

List all publications referred to in the main test. Add references according to the guidelines for thesis writing of the A.U, Graduate School of Natural and Applied Sciences. For more information please click the below link:

http://fenbilimleri.ankara.edu.tr/tr/duyurular/9-tez-yazim-kurallari

Note the internet source link with the access date.

**For example**; http://www.XXXX.com (access date: “X.X.X, time”)

**GLOSSARY AND NOMENCLATURE**

Add a glossary only if the text is necessarily heavy with specialized terms,abbreviations mathematical symbols or technical jargon. If you have only the occasional term in your report, define it as part of the text.

**APPENDIX(OPTIONAL)**

Appendices and supplementary material (charts, graphs, pictures, computer codes, etc.).The appendix should contain information that substantiates the report but that is now required for a convincing understanding of your work. The appendix may contain bulky data such as lengthy tables, computer print-outs, descriptions of processes or operations, maps, and so on. Assign consecutive letters or numbers to each, for example “Appendix A”, “Appendix B”, or “Appendix 1” , “Appendix 2”. Not all reports have or need an appendix.