

ENM 200 SUMMER PRACTICE I

This summer practice should be prepared in a report format including the following questions.

1. What are the general information about the company? (Company name and date of foundation, place (full address), company type, products, the sector in which the company is located, its place in the national economy and its relations with the related sectors, organizational scheme of the company, basic authority and responsibilities of each unit).
2. Specify the inputs that contribute to the production of the company.
3. Explain suppliers of the company and the relationship between the company and its suppliers, with justifications.
4. Evaluate the location of the company in terms of facility location.
5. **Review the cost analysis system of the company.** Perform an exemplary cost analysis study incorporating break-even analysis. Is the company calculating unit prices for the product? Provide information on how it is calculated. Specify the targeted and actual production quantities and unit prices for the last three years, interpret. Interpret annual fluctuations in the quantity and prices. Calculate the added-value for a given year.
6. In the company, how the decision of when and how products will be produced is made? Explain.
7. **Which factors are taken into account when determining the capacity of the company?** Is the firm working at full capacity, otherwise discuss the reasons for it.
8. **What is the type of company's production system?** Explain.
9. Who decides how much and what will be produced in production planning activities?
10. How are production planning decisions made, how can these decisions be changed?
11. What type of stocks are there in the company? How does the firm decide for which product, when, and how much to order?
12. What is the quality planning and control policy of the company? How is the quality control work carried out? Explain.

13. Discuss the company's software and hardware infrastructure in detail. Provide information about enterprise-wide software.

14. For a product that produced in the company, prepare the process diagram that shows all the processes such as transportation, storage and assembly, which starts with the entry of raw materials into the factory and requires the creation of the product. Do you think some changes can be made so that the process being implemented can be improved? Indicate how you can provide this.

15. Describe a problem verbally within the scope of operations research, establish a linear programming model which is suitable for this verbal definition, solve the problem, interpret and do sensitivity analysis.

CONCLUSION

At the end of the report, add the section "Conclusion and Evaluation" with the following comments.

- Is the way and the method you followed in the summer practice enough in terms of scope and general approach? If not enough, indicate the faults. Write if you have suggestions for a better method.
- What other kinds of information do you think you need in order to better understand the production systems in your future industrial engineering work?
- Based on your summer practice experience, discuss the differences between industrial engineering and other engineering branches in production systems in terms of authority and responsibilities.
- If there is an industrial engineer working at the company, write your opinion about the works they have done.
- Discuss the attitudes and behaviours of senior management unit with respect to industrial engineering studies.