

Department of Industrial Engineering

INDE2910 (INDE3920) -INDE3910 (INDE4920)

Industrial Training

Report

Name

Student ID

Date

Course Code for the Internship: INDE2910 ☐ INDE3910 ☐ INDE3920 ☐ INDE4920 ☐

Company Name:

Company Address:

Starting and Completion Dates:

Department(s) Worked In:

Supervisor’s Name, Position, Phone Number, Email:

TABLE OF CONTENTS

[1 WEEKLY WORK PLAN 4](#_Toc141013746)

[2 INTRODUCTION 6](#_Toc141013747)

[2.1 The Companyand Corporate Partnership 6](#_Toc141013748)

[2.2 IndustrialSector and Customers 6](#_Toc141013749)

[2.3 Technology inManufacturing and Services 6](#_Toc141013750)

[2.4 Organization 6](#_Toc141013751)

[3 OVERALL ANALYSIS 8](#_Toc141013752)

[3.1 Input / Output Analysis 8](#_Toc141013753)

[3.2 Layout 8](#_Toc141013754)

[3.3 Location 8](#_Toc141013755)

[4 MANAGEMENT INFORMATION SYSTEM 9](#_Toc141013756)

[4.1 Decision Making 9](#_Toc141013757)

[4.2 Decision Support Systems 9](#_Toc141013758)

[5 MANUFACTURING SYSTEM 10](#_Toc141013759)

[5.1 Materials 10](#_Toc141013760)

[5.2 Manufacturing Mode 10](#_Toc141013761)

[5.3 Shop Layout 10](#_Toc141013762)

[5.4 Material Handling 10](#_Toc141013763)

[5.5 Manufacturing Processes 10](#_Toc141013764)

[5.6 Manufacturing Costs 10](#_Toc141013765)

[5.7 Productivity 10](#_Toc141013766)

[5.8 Production Planning and Control 10](#_Toc141013767)

[5.9 Inventory 10](#_Toc141013768)

[5.10 Resource Allocation 10](#_Toc141013769)

[5.11 Workforce Requirements 10](#_Toc141013770)

[6 SERVICE SYSTEM 11](#_Toc141013771)

[6.1 Process and Information Flow 11](#_Toc141013772)

[6.2 Process Classification 11](#_Toc141013773)

[6.3 Back Office 11](#_Toc141013774)

[6.4 Costs 11](#_Toc141013775)

[6.5 Productivity 11](#_Toc141013776)

[6.6 Service Operations Planning and Control 11](#_Toc141013777)

[6.7 Planning Decisions 11](#_Toc141013778)

[6.8 Inventory Management 11](#_Toc141013779)

[6.9 Demand Smoothing 11](#_Toc141013780)

[6.10 Queues 11](#_Toc141013781)

[6.11 Workforce Planning 11](#_Toc141013782)

[7 QUALITY PLANNING AND CONTROL 12](#_Toc141013783)

[7.1 Quality of a Product or Service 12](#_Toc141013784)

[7.2 Quality Features 12](#_Toc141013785)

[7.3 Quality Assurance 12](#_Toc141013786)

[7.4 Quality Assurance Tools 12](#_Toc141013787)

[7.5 Cost of Quality 12](#_Toc141013788)

[8 INDUSTRIAL ENGINEERS AT WORK 13](#_Toc141013789)

[8.1 Observation of Daily Activities 13](#_Toc141013790)

[8.2 Interviews 13](#_Toc141013791)

[9 PROJECT PROPOSAL 14](#_Toc141013792)

[10 CONCLUSION 15](#_Toc141013793)

[10.1 Conclusion 15](#_Toc141013794)

[10.2 Işık University Graduates at Workplace 15](#_Toc141013795)

[10.3 Short Evaluation 15](#_Toc141013796)

[11 APPENDIX 16](#_Toc141013797)

[11.1 Dictionary 16](#_Toc141013798)

[11.2 References 16](#_Toc141013799)

# WEEKLY WORK PLAN

|  |  |
| --- | --- |
| **Week 1** |  |
| Department(s) | Tasks, Responsibilities, Accomplishments |
|  |  |

|  |  |
| --- | --- |
| **Week 2** |  |
| Department(s) | Tasks, Responsibilities, Accomplishments |
|  |  |

|  |  |
| --- | --- |
| **Week 3** |  |
| Department(s) | Tasks, Responsibilities, Accomplishments |
|  |  |

|  |  |
| --- | --- |
| **Week 4** |  |
| Department(s) | Tasks, Responsibilities, Accomplishments |
|  |  |

# INTRODUCTION

## The Company and Corporate Partnership

## Industrial Sector and Customers

## Technology in Manufacturing and Services

## Organization

|  |  |
| --- | --- |
| Department |  |
| Number of Employees |  |
| Number of IEs |  |
| Main function, responsibilities, duties of the department |
| Functions and responsibilities currently performed by or would potentially be best performed by IEs |

|  |  |
| --- | --- |
| Department |  |
| Number of Employees |  |
| Number of IEs |  |
| Main function, responsibilities, duties of the department |
| Functions and responsibilities currently performed by or would potentially be best performed by IEs |

|  |  |
| --- | --- |
| Department |  |
| Number of Employees |  |
| Number of IEs |  |
| Main function, responsibilities, duties of the department |
| Functions and responsibilities currently performed by or would potentially be best performed by IEs |

# OVERALL ANALYSIS

## Input / Output Analysis

## Layout

## Location

|  |  |  |  |
| --- | --- | --- | --- |
|  | Very Important | Influential | Unimportant |
| Distribution needs for the products |  |  |  |
| Availability or physical characteristics of raw materials |  |  |  |
| Physical characteristics of the products |  |  |  |
| Labor availability and quality |  |  |  |
| Transportation facilities |  |  |  |
| Proximity to suppliers |  |  |  |
| Flexibility |  |  |  |
| Competitive Positioning |  |  |  |
| Demand Management |  |  |  |
| Access |  |  |  |
| Visibility |  |  |  |
| Traffic |  |  |  |
| Parking |  |  |  |
| Expansion |  |  |  |
| Environmental factors |  |  |  |
| Laws, taxation, incentives, government politics etc. |  |  |  |
| Cost of land and buildings |  |  |  |

# MANAGEMENT INFORMATION SYSTEM

## Decision Making

## Decision Support Systems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DSS | Decision type (Strategic/ Tactical/ Operational) | Usage frequency (Daily, weekly, monthly, yearly) | Developed by (Internally or third party) | Used by (Departments) | Number of users | Usedfor (Describe) |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**IMPORTANT!**

**If your company is a manufacturing company, continue with Section 5. If it is a service company, skip to Section 6.**

**If your company operates in both manufacturing and service sectors, choose only one of them and proceed to the relevant section.**

# MANUFACTURING SYSTEM

## Materials

## Manufacturing Mode

## Shop Layout

## Material Handling

## Manufacturing Processes

## Manufacturing Costs

## Productivity

## Production Planning and Control

## Inventory

## Resource Allocation

## Workforce Requirements

# SERVICE SYSTEM

## Process and Information Flow

## Process Classification

## Back Office

## Costs

## Productivity

## Service Operations Planning and Control

## Planning Decisions

## Inventory Management

## Demand Smoothing

## Queues

## Workforce Planning

# QUALITY PLANNING AND CONTROL

## Quality of a Product or Service

## Quality Features

## Quality Assurance

## Quality Assurance Tools

## Cost of Quality

# INDUSTRIAL ENGINEERS AT WORK

## Observation of Daily Activities

## Interviews

1. Can you tell me about your education life? What degrees from which schools do you hold? What are the years of these degrees?
2. Can you tell me about your career? In which positions, for which companies and for what periods of time did you work before? Which one of those provided you skills and background that helps you fulfill your responsibilities today at this position?
3. How do you like your current position? Can you use all of your skills and experience in this position?
4. How do you like this company? What can you tell me about the corporate culture at this company? What business practices do you like or dislike? What do you think this company does well, compared to its competitors? What about the things that should be improved?
5. Do you think that the IEs in Turkey and in particular in this sector of business are employed in jobs that are most suited for them? Do you think that the managers know enough about the profession of industrial engineering? How do you see the future of industrial engineers?
6. What would you recommend to a prospective IE in preparing for and shaping their career? What would be the most essential skills soon-to-be graduates should aim to acquire? What do the hiring executives look for in new graduates? What makes a candidate better than others in the interviews and hiring process?
7. How important do you think the functions performed by IEs in this company are for the success and improvement of it?
8. Would you study industrial engineering again if you were getting a degree today? Why?
9. What knowledge from your classes did you have a chance to use in your job?
10. What course(s) would you take if you could go back to university?

# PROJECT PROPOSAL

***IMPORTANT:* Section 9 must be answered by only INDE3910 or INDE4920 students.**

# CONCLUSION

## Conclusion

## Işık University Graduates at Workplace

## Short Evaluation

Answer the following questions on a scale from 1 (worst) to 5 (best).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |
| Would you recommend others to do their internship in this company? |  |  |  |  |  |
| How would you rate your internship? |  |  |  |  |  |
| Was your internship helpful? |  |  |  |  |  |

# APPENDIX

## Dictionary

## References