

# **UNIVERSITETEKNOLUCEMARA**

# FACULTY OF CIVIL ENGINEERING.

## INDUSTRIAL TRAINING REPORT

## MULAZ BIN MOHD NASRUDDIN

(2015678016)

MARUAN FEGRATED ENGINEERS SON, BHD LEVEL II, MAJU TOWER, 1001 JALAN SULTAN ISMAIL, 50250 KUALA LUMPUR.

人形积的。 我们必须 2017

### ABSTRACT

This Industrial Training is one of the requirements for students to be fulfilled in order to obtain the award of Diploma in Civil Engineering. Each student in this field enables to go out and gain more practical knowledge of what they have been educated in class and to gain industry based skills. The students were necessary to experience an industrial training for duration of two months which consist of 8 weeks before completing their courses.

Industrial Training courses give students expose to the actual working environment of engineering works. Besides, this course encourages students in teamwork, spirit and familiarize with colleagues. By undergo the industrial training, students will generate a trust worthy and responsible person. In addition, industrial training is to build self-confidence among students to get them involved in Civil Engineering projects and let students know the technical knowledge and professionalism.

I was assigned in civil and structural engineering department during my industrial training. This industrial training surely improves the understanding of civil engineering works which are undertaken the issues and challenges that need to be done by the engineer. As I was assigned in consulting work which appropriate to office works that more involved in designing the structure and infrastructure work. In addition, I also might understand architectural and structural drawings that explained with the relevant signs and symbols indicating various items on such drawing. Precisely it measures the creativeness of brainstorming in conducting the task and solving the issues.

This training gives me worthy experience from the view of project that consists of construction of new buildings, road and drainage works. This Industrial Training helps me to understand the job's need and increase my understanding to be more clear and wide in civil and structural engineering field. Furthermore, it helps me improve my communication skills, knowledge about infrastructure and also structural works which more uses of design software.

### ACKNOWLEDGEMENT

At the beginning, I would like to express my deepest gratitude to almighty Allah for giving me the ability to work hard successfully and strength that He has given to me in finishing my internship report and logbook for my Industrial Training. I do show my appreciation for His blessings to my daily life, good health, healthy mind and good ideas.

Bearing in mind previous I am using this opportunity to express my deepest gratitude and special thanks to Ir. Mat Jusoh Bin Mamat, Managing Director of Maju Integrated Engineers Sdn Bhd (MIE) that giving me a chance and opportunity to work as a practical training in his organization in order to complete my internship session within 2 month.

I express my sincere gratitude and thanks to my supervisor, Nor Hisham bin Ngadimin, Lead Engineer of MIE which has enabled me to have an experience in the dynamic environment of the construction sector and for the valuable time sacrifice of his busy schedule of work to guide me throughout this industrial training.

At last, I would like to give huge thanks also to all office staffs for giving me a great experience throughout my training period because of their guidance, help and plenty of information about the infrastructure repair work, structure work and also other civil project. I also would like to show my appreciation to all the individuals who spent their time explaining me the procedure of their respective sections and sharing me their extra knowledge about working experience.

### **TABLE OF CONTENTS**

	Contents	Page Number
Chapter 1: Introduction		
1.1	Introduction	1
1.2	Objectives of industrial training	1
1.3	Scope of the report	1
1.4	Background of the company	2
1.5	MIE group	3
1.6	Office location for MIE	4
1.7	Organizational structure	6
1.8	Top management personnel	7
1.9	Major project descriptions	8
Chapter 2: Training Attended		
2.1	Introduction	16
2.2	Exposure level	16
2.3	Conclusion	21
Chapter 3: Technical Report		
3.1	Introduction	22
3.2	Rectification work at IWK, Cheras	22
3.3	Lab testing for bolts	27
3.4	Site visit at Velodrom Nasional, Nilai	30
3.5	Reinforcement Concrete (RC) structural design	32
3.6	Experience gained	35
Chapter 4: Conclusion		
4.1	Introduction	36
4.2	Lesson learned	36
4.3	Knowledge gained	36
4.4	Recommendations	37
References		38
Appendice	5	39

### **CHAPTER 1: INTRODUCTION**

### 1.1 Introduction

As we know, internships provide real world experience for students to explore or gain the relevant knowledge and skills required to enter into a particular career field. This course provides students with learning opportunities in the workplace to receive practical experience in order to expand their career knowledge.

Internship is a short term course which focuses on getting some of their job training and taking what has been learned in the classroom and applying it to the real world. Interns usually have a supervisor who assigns specific tasks and evaluates the interns overall work. Faculty supervisor will work along with the site supervisor to ensure that the necessary learning is taking place.

### **1.2** Objectives of industrial training

The objectives of industrial training are as follow:

- 1. To apply theories learnt in classroom in working situation.
- 11. To assist in the determination of career goals.
- 111. To fulfil the award of the diploma of Universiti Teknologi Mara (UiTM).
- 1v. Improve communication and management skills.
- v. Enables student to interpret some technical terms more easily.
- v1. Provides student the opportunity to prepare for employment after graduation.

### **1.3** Scope of the report

The scope of this report is basically to present in details, the various activities carried out by me at Maju Integrated Engineers Sdn. Bhd., both site work and office work as well as provide the general background knowledge about the aspects of Civil Engineering applied while undergoing this internship programme.