



UNIVERSITI TEKNOLOGI MARA

FACULTY OF CIVIL ENGINEERING

INDUSTRIAL TRAINING REPORT

MOHAMAD IKHMAL FAIZ BIN IBRAHIM  
(2015883858)

JABATAN KERJA RAYA DAERAH JOHOR BAHRU  
677, JALAN PETRI, KAMPUNG BAHRU, 80100  
JOHOR BAHRU, JOHOR.

JUNE 2015

## **TABLE OF CONTENTS:**

<b>Subject</b>	<b>Page</b>
<b>Table of content .....</b>	<b>1-2</b>
<b>List of Tables .....</b>	<b>3</b>
<b>List of Figures .....</b>	<b>4-5</b>
<b>Abstract .....</b>	<b>6</b>
<b>Acknowledgement .....</b>	<b>7</b>
<b>Chapter 1: Introduction .....</b>	<b>8</b>
<b>1.1 Introduction .....</b>	<b>8-10</b>
<b>1.2 Background of the Company .....</b>	<b>11-13</b>
<b>1.3 Organizational Structure .....</b>	<b>14</b>
<b>1.4 Nature of the Business .....</b>	<b>15-17</b>
<b>1.5 Conclusion .....</b>	<b>18</b>
<b>Chapter 2: Training Attended .....</b>	<b>19</b>
<b>2.1 Introduction .....</b>	<b>19</b>
<b>2.2 Exposure Level .....</b>	<b>20-26</b>
<b>2.3 Conclusion .....</b>	<b>26</b>
<b>Chapter 3: Technical Report .....</b>	<b>27</b>
<b>3.1 Introduction .....</b>	<b>27</b>
<b>3.2 Technical Work .....</b>	<b>28-43</b>
<b>3.4 Conclusion .....</b>	<b>44</b>

<b>Chapter 4: Conclusion .....</b>	<b>45</b>
<b>4.1 Introduction .....</b>	<b>45</b>
<b>4.2 Lesson Learned .....</b>	<b>46</b>
<b>4.3 Knowledge Gained .....</b>	<b>47-48</b>
<b>4.4 Limitation and Recommendations .....</b>	<b>49</b>
<b>References .....</b>	<b>50-51</b>
<b>Appendix A: Form/ Letter .....</b>	
<b>A.1 Industrial Training placement information form .....</b>	
<b>A.2 Industrial Training Application Letter .....</b>	
<b>A.3 Example of Resume (CV) .....</b>	
<b>A.4 Industrial Training Placement Confirmation Form .....</b>	
<b>A.5 It Report Duty Form .....</b>	
<b>A.6 Current Location Form .....</b>	
<b>Appendix B: Assessment .....</b>	
<b>B.1 IT Report Evaluation Form .....</b>	
<b>B.2 IT Log Book Evaluation Form .....</b>	
<b>B.3 Industrial Supervisor Evaluation Form .....</b>	
<b>B.4 Faculty Supervisor Evaluation Form .....</b>	
<b>Appendix C .....</b>	
<b>C.1 Course Outcomes- Program Outcomes Matrix .....</b>	

## **LIST OF TABLES**

<b>Subject</b>	<b>Page</b>
<b>Table 1.4.1 Construction Phase.....</b>	<b>15</b>
<b>Table 2.1.1 Unit Detail .....</b>	<b>19</b>
<b>Table 3.1.1 Project Info 1 .....</b>	<b>28</b>
<b>Table 3.1.2 Piling points .....</b>	<b>28</b>
<b>Table 3.2.1 Project Info 2 .....</b>	<b>32</b>



## LIST OF FIGURES

Subject	Page
Figure 1.1.1 .....	10
Figure 1.2.1 .....	11
Figure 1.2.2 .....	12
Figure 1.2.3 .....	13
Figure 1.3.1. ....	14
Figure 2.2.1 .....	20
Figure 2.2.2 .....	20
Figure 2.4.1 .....	22
Figure 2.4.2 .....	22
Figure 2.5.1 .....	23
Figure 2.6.1 .....	24
Figure 2.6.2 .....	24
Figure 2.8.1 .....	26
Figure 3.1.3 .....	29
Figure 3.1.4 .....	29
Figure 3.1.5 .....	30
Figure 3.1.6 .....	30
Figure 3.1.7 .....	31
Figure 3.2.2 .....	34
Figure 3.2.3 .....	34
Figure 3.2.4 .....	35
Figure 3.2.5 .....	35

<b>Figure 3.2.6 .....</b>	<b>36</b>
<b>Figure 3.3.1.1 .....</b>	<b>37</b>
<b>Figure 3.3.1.2 .....</b>	<b>37</b>
<b>Figure 3.3.2.1 .....</b>	<b>38</b>
<b>Figure 3.3.2.2 .....</b>	<b>38</b>
<b>Figure 3.3.2.1 .....</b>	<b>39</b>
<b>Figure 3.4.1 .....</b>	<b>40</b>
<b>Figure 3.4.2.....</b>	<b>40</b>
<b>Figure 3.4.3.....</b>	<b>41</b>
<b>Figure 3.4.4.....</b>	<b>41</b>
<b>Figure 3.5.1.....</b>	<b>42</b>
<b>Figure 3.5.2.....</b>	<b>42</b>
<b>Figure 3.5.3.....</b>	<b>43</b>
<b>Figure 3.5.4.....</b>	<b>43</b>

## ABSTRACT

This internship report contains four chapters which students try to explain students two month internship at Jabatan Kerja Raya Daerah Johor Bahru. The content of all chapters was broadly explained.

In the first, students give details about the company background including vision and mission. Jabatan Kerja Raya (JKR) handle the projects of government only. The history was added so the people can easily know Jabatan Kerja Raya.

Second chapter is the chapter that explains about students overall internship activity in 8 weeks. In this chapter students record all activities that they have been execute in this 8 week. It give more details about what student have do in JKR for the passes 8 weeks in construction industry.

After the second chapter so now students go straight to the third chapter. Third chapter explains about the projects that the students have joined during their internship. Other than that, in this chapter students also explains about their experience that they have gained by joining Jabatan Kerja Raya.

So the final chapter students conclude about the experienced that they have gained during their internship about 8 weeks at JKR. This final chapter students conclude all about the three chapter that the students have write earlier.

## ACKNOWLEDGEMENT

With grateful students would like to say thank you to the person at Jabatan Kerja Raya Daerah Johor Bahru who have helped they a lot during their internship program. They would glad to say thank you also to Mr Mohd Firdaus Bin Mohd Akhbar for being the mastermind behind their internship program.

The internship that students had with Jabatan Kerja Raya was a great chance for learning and professional development. Students would say that they was lucky because they was provided with an opportunity to be a part of Jabatan Kerja Raya staff. Students also grateful because they had a chance to meet with many wonderful people and professionals who led they through their internship period.

Bearing in mind previous students used this opportunity to express their deepest gratitude and special thanks to Mr Mohd Isa Bin Sulaiman that have took time to hear guide and keep the students on the correct path and allowing they to carry out their project.

Students express their deepest thanks to Mr Mohd Azrul Hisham Bin Mahin the engineer at special project and road unit for taking part in the students internship by giving them assignment, some advice and also thanks to Ms. Adrina Rosseira Binti Abu Talip for become our faculty supervisor and willing to hear students presentation during their internship period

Students receive this opportunity as a big milestone in their future development. Students hope that the skills that they have got during their internship can be use during their studies.



## CHAPTER 1

### 1.1 INTRODUCTION

Jabatan Kerja Raya Malaysia is the federal government department in Malaysia under Ministry of Works Malaysia (MOW) which is responsible for construction and maintenance of public infrastructure in West Malaysia and Labuan. In Sabah and Sarawak, a separate entity of Public Works Department exists under respective state government's jurisdiction but both departments are also subordinate to the parent department at the same time. JKR was divided to a few department which is:

1. Building
2. Road
3. Slope engineering
4. Electrical
5. Mechanical
6. Water
7. Military works

## HISTORY OF THE COMPANY

In 1954, departments in Tanah Melayu Had a change to develop program when the British government have took a step to separate Tanah Melayu administration from their administration which is at Singapore.

In 1956, the head of the minister and a few of minister have been appointed to lead “Federal government of Tanah Melayu. A few of department have been established including Ministry of Works, Post and Telekom.

In 1973, Ministry of Works, Post and Telekom have been rearrange and the name was changed to Ministry of Works and Transportation which the function and responsibilities of Jabatan Kerja Raya have been retained and placed under administration.

In 1978, Ministry of Works and Transportation named was changed again to Ministry of Works and Public Facilities suitable with additional function and their role.

In 1980, government have took a decision to rename the Ministry of Works and Public Facilities to Ministry of Works Malaysia parallel with their specialization and line with the responsibility. The name remains until now.

**Figure 1.1.1** shows that history of this department on how Ministry of Works position be right now.

## Sejarah Penubuhan KEMENTERIAN KERJA RAYA

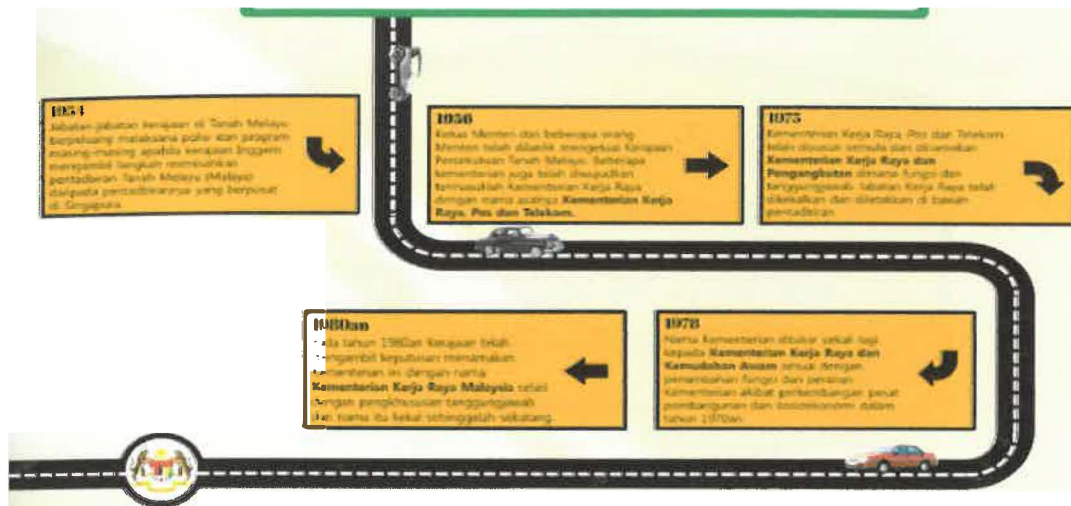


FIGURE 1.1.1

## 1.2 BACKGROUND OF THE COMPANY



**FIGURE 1.2.1**

Name of company: Jabatan Kerja Raya Daerah Johor Bahru

Business Address: JKR Daerah Johor Bahru, 677 Jalan Petri, Kampung Bahru,  
80100 Johor Bahru, Johor.

Contact No. : 07-2223133

Fax No. : 07-2223835

Website : <http://jkr.johor.gov.my/index.php/ms/jkr-daerah/johor-bahru>

Type of  
Company : Government



## LOGO MEANING



**FIGURE 1.2.2**

Logo JKR reflect all areas of work that has been entrusted to the department as shown in **figure 1.2.2**. Purposes of the objects in the logo are as follows:

First of all, the black curve line represents the waterworks while to show that Jabatan Kerja Raya a dynamic organization. Secondly, thick black line represent the work of the bridge-shaped sculpture in addition to describing that Jabatan Kerja Raya run all the engineering works.

The black straight line on the bridge-shape show that Jabatan Kerja Raya also run the road works by build, maintain and care for it. The fourteen black line represent the building works while show that the number of states in Malaysia is fourteen including Wilayah Persekutuan.

Explanation about the colour of the logo:

The yellow colour represents the maturity or maturities to show that Jabatan Kerja Raya is the organization that have been longer established while showing the images of the most mature in achieving its objective.

Black colour symbolize the strength or unity as a feature among the branches in handling the projects. The grey colour represent humility in service among the staff in Jabatan Kerja Raya.

## MISSION OF THE DEPARTMENT

1. Help out customer to achieve their mission and give service by cooperate with them.
2. Standardization of processes and system to deliver consistent outcomes.
3. Provides asset management services with an effective and innovative projects
4. Give more strength to the existing engineering.
5. Prioritize integrity in serving customer.
6. Build a harmonious relationship with the society.
7. Take care of the environment during service.

## VISION OF THE DEPARTMENT

To be a world-class service providers and centre of excellence in the field of asset management, project management and engineering in the development of the country's infrastructure is based on human capital and the latest technology that is creative and innovative as shown in **figure 1.2.3**

### Visi JKR

Kami akan menjadi pemberi perkhidmatan bertaraf dunia dan pusat kecemerlangan dalam bidang pengurusan aset pengurusan projek dan kejuruteraan untuk pembangunan infrastruktur negara berteraskan modal insan yang kreatif dan inovatif serta teknologi terkini

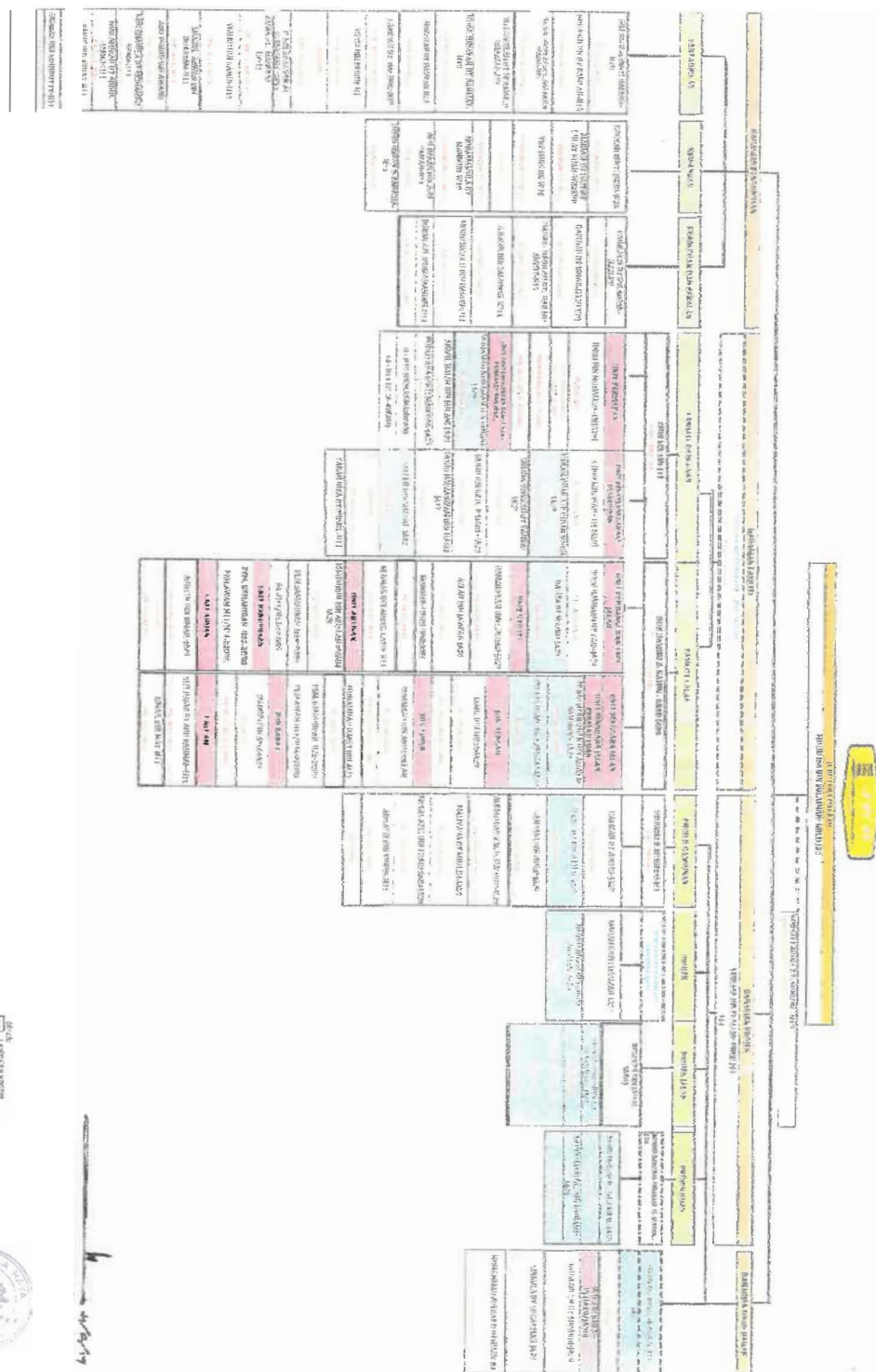
Misi JKR ialah untuk menyumbang kepada pembangunan negara dengan

**Peralat**

1. Membantu pelanggan kami merealisasikan maklumat dasar dan menyampaikan perkhidmatan melalui kerjasama sebagai rakan kongsi strategic.
2. Mempiawai proses dan system kita untuk memberikan hasil perkhidmatan yang konsisten.
3. Menyediakan perkhidmatan pengurusan aset dan projek yang efektif dan inovatif
4. Mengukuhkan kompetensi kejuruteraan sedia ada
5. Membangunkan modal insan dan kompetensi baru.
6. Mengutamakan integrity dalam memberikan perkhidmatan
7. Membina hubungan harmoni dengan masyarakat.
8. Memelihara alam sekitar dalam penyampaian perkhidmatan.

**FIGURE 1.2.3**

### 1.3 ORGANIZATIONAL CHART



**FIGURE 1.3.1**

## 1.4 NATURE OF THE BUSINESS

### PROJECT MANAGEMENT (CLIENT'S CHARTER)

#### PRE-CONSTRUCTION PHASE

Subject to the conditions no matter the site, the provision of adequate and scope of the projects approved by the Economic Planning Unit (EPU), JPM, pre-construction phase (planning to Letter of Acceptance issued) is within 12 to 15 months.

#### CONSTRUCTION PHASE

Project	Cost and Construction Period		
Standard Plan : Building, Air Base and Maritime	RM 500 thousands and below <b>15 months</b>	RM 500 thousands – RM 5 millions <b>24 months</b>	RM 5 million and above <b>36 months</b>
Standard Plan : Road and Infrastructure	RM 500 thousands and below <b>9 months</b>	RM 500 thousands – RM 20 millions <b>24 months</b>	RM 20 million and above <b>36 months</b>
Complex Project (Road, Slope, Building, Air Base and Maritime etc.)	Completed within the time and cost agreed with the customer.		

**TABLE 1.4.1 CONSTRUCTION PHASE**



## ASSET MAINTENANCE

### ROAD

- ❖ Temporary repair holes actions (potholes) will be implemented within 1 day and permanent corrective actions will be implemented within 3 days after receiving the complaint.
- ❖ In the event of circumstances that disrupt traffic or public safety, such as fallen trees or landslides, action will be taken within 24 hours of being identified or complaints.
- ❖ Each shutdown scheduled will be announced through mass media at least three days before the work is carried out.

### BUILDING

- ❖ Complaints about critical damage such as leaking water pipes, roof or sewage system will be taken within 1 day.
- ❖ Actions of common fault repair within 1 month.

## TECHNICAL ADVICE

### SLOPE ENGINEERING

- a. The ruins of the slope with high impact :
  - Site visit should be done within 1 day from the day of the incident.
  - The preliminary report prepared within 3 working days and the date of the site visit.
- b. The ruins slope with small impact :

Recommendation will be provided in the following periods:

  - The situation required a site investigation – one month after the site investigation report obtained.
  - Circumstances which do not require site investigation – 2 weeks from the date of the site visit.
- c. Technical Review Report Geotechnical of Local Authorities (PBT) is available within 1 week after the site visit was made.

## MAINTENANCE ENGINEERING

Government assets disposal approval decision is given within 14 days from the date of receipt of complete application recommendations. Submit comments on the application development side of the road from the local authority within 2 weeks after receiving a complete application documents.

## FORENSIC ENGINEERING

a) The work of forensic structural, geotechnical and road:

Initial report based on site investigation and laboratory testing of high impact failure is provided within 5 working days and little impact in the last two weeks of the date of the site visit. The final report is based on site investigation and laboratory tests are available within 2 months after receiving test results and monitoring.

b) For forensic work maritime and airport:

Initial reports based on site investigation and laboratory testing of high impact and low-impact provided within 7 working days from the date of the site visit. Initial reports based on site investigation and laboratory tests are available within 2 months after receiving test results and monitoring.

## 1.5 CONCLUSION

The conclusion that students have got from their internship period about 8 weeks, it is important to know the background of the company or a government department. This is because of the background we will know what is the company or department all about.

About the history, as we know that all the place that have been developed must have their history. So in this chapter, students put the history to told everyone about the company history.

After that, the mission and vision the company also important because if mission and vision is know so the students can know the target of the company.

From the organizational chart, students can conclude that the first one if joining the company or department, students have to know each staff in the company. It will makes the students easy to communicate with others.

## CHAPTER 2

### 2.1 INTRODUCTION

At Jabatan Kerja Raya students have been transferred to a different unit every week. Different unit have different way of works. This steps help them to know all the unit in Jabatan Kerja Rata. By doing this students skills can be improved as well.

The list of department that the students have been there as shown in the figure below:

<b>NO</b>	<b>UNIT</b>	<b>DUE DATE</b>
<b>1.</b>	<b>ADMINISTRATION</b>	<b>18/04/2017</b>
<b>2.</b>	<b>FINANCE</b>	<b>19/04/2017-20/04/2017</b>
<b>3.</b>	<b>CONTRACT AND QUANTITY SURVEYING</b>	<b>23/04/2017-25/04/2017</b>
<b>4.</b>	<b>BUILDING UNIT</b>	<b>26/04/2017-07/05/2017</b>
<b>5.</b>	<b>BUILDING MAINTENANCE UNIT</b>	<b>08/05/2017-17/05/2017</b>
<b>6.</b>	<b>SPECIAL PROJECT AND ROAD UNIT</b>	<b>18/05/2017-29/05/2017</b>
<b>7.</b>	<b>ROAD MAINTENANCE UNIT</b>	<b>30/05/2017-11/06/2017</b>

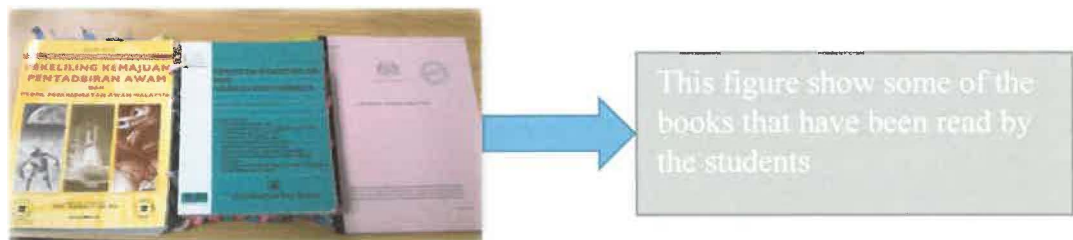
**TABLE 2.1.1**

Based on the list show that above there were a lot things that students have learn at JKR Daerah Johor Bahru.

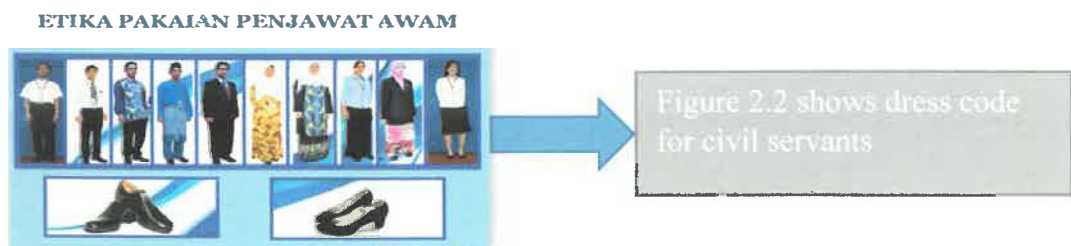


## 2.2 ADMINISTRATION UNIT

At administration unit, exposed to the concept and scope of work of administration department. Administration unit of a government department have many scope of work. Scope of work in every unit is important because if the scope of work is don't know by the staff so the work will not be done. At JKR, there were a few scope of work in administration unit that we have to know. For the first one is to manage the discipline of staff. This is the most important scope of work at the office. Second one is manage the leave of the staff. Other than that, administration unit also planning and manage training courses, seminars to the staff. Besides that, this unit also planning and implementing the list of task (Job Rotation) and divide the task balanced to all the staff. Manage and planning improvements to the Manual of Work Procedures and Desk Files members also one of the scope of work at this unit. Last but not least, this unit also have to validate the position of the staff at this department. Other than being exposed to concept and the scope of work of administration department, Read about "Perintah AM Bab A dan Bab C". This command is important to the staff of government department because it's about the leaves and the rule that have to be follow by the government staff.



**FIGURE 2.2.1**



**FIGURE 2.2.2**

## 2.3 FINANCE

Finance unit is a unit that is important in a government department or a company. This is because finance unit manage all things that involved in finance of a department or company. At this department, learn about how to record the finance report and also to record the bill and invoice were important. Other than that, the scope of work at finance unit was being exposed. Firstly, the scope of work is to manage the salary of the staff. Secondly, finance unit also manage about loans of housing and transportation. Ensuring financial management system implemented in an efficient, effective and arranged.

## 2.4 CONTRACT AND QUANTITY SURVEYING

The scope of work at contract and quantity surveying is manage procurement of material. It means that all the material that is use in the construction need to be check by this unit before it being proceed with construction. Other than that, this unit also manage the contract for the government project. The project is divide into two parts. The first one is with consultant and the second one is without consultant.

### 1) MENCUKUS PEROLEHAN

- 1.1 SEBUT HARGA
- 1.2 PEROLEHAN SECARA KONVENSIONAL
  - 1.2.1 TENDER TERBUKA
  - 1.2.2 TENDER TERHAD
  - 1.2.3 RUNDINGAN TERJUS
- 1.3 PEROLEHAN KERJA TENDER SECARA REKA DAN BINA
  - 1.3.1 TENDER TERBUKA
  - 1.3.2 TENDER TERHAD
  - 1.3.3 RUNDINGAN TERJUS
- 1.4 PEROLEHAN SECARA DARURAT
- 1.5 PEROLEHAN KERJA PEMBIAYAAN ASILIG
- 1.6 PEROLEHAN KERJA WANG PERUKUTUJAJA SEMENTARA
  - 1.6.1 SECARA LANTIKAN TERUS
  - 1.6.2 SECARA SEBUTHARGA
  - 1.6.3 SECARA TENDER

**FIGURE 2.4.1**

**Figure 2.3** shows about the quantity surveying management

MENKONTRAK  
MENKONTROL

**FIGURE 2.4.2**

**Figure 2.4** shows about management of contract.

## 2.5 BUILDING

For building project, it has five scope of work. Firstly, plan, coordinate and monitor the implementation of federal and state extended to the state Jabatan Kerja Raya. Implementing structural design work for new projects.

Besides that, this unit have to coordinate the implementation progress of the physical and the financial progress of the building projects. The fourth is to coordinate maintenance of state building and some federal building.

Last one is provide technical advice to departments and agencies in need. That is the scope of work that have been set by Ministry of Works Malaysia. At this unit, students have been brought to site visit of “Cadangan Membina Klinik Kesihatan Jenis 3 (KK3) dan Kuarters” at Taman Ungku Tun Aminah, Johor Bahru. This site visit purpose to watch the piling works.



**FIGURE 2.5.1**

In this **figure 2.5.1** show the injection pile machine

## 2.6 SPECIAL PROJECTS AND ROAD UNIT

For special project unit, the scope of project is handle a special project that was fully handle by Jabatan Kerja Raya. As an example the students have went to site visit of “Pembinaan Kuarters dan Dewan Tertutup Bagi Jabatan Imigresen Malaysia di Bandar Baru Uda. This project was fully handle by Jabatan Kerja Raya. For road unit, is manage project about the road.



**FIGURE 2.6.1**

**Figure 2.6.1** shows site visit and the installation of Industrialized Building System (IBS) column.



**FIGURE 2.6.2**

This figure shows the premis works of “Cadangan Menggantikan Jambatan Sungai Plentong di Jalan Masai Lama”.

## 2.7 BUILDING MAINTENANCE

Building maintenance department is need whether at a company or a government department. Perform all infrastructure development projects economically, effectively and efficiently to meet the needs. Investigate the technical matters related to the extra work or repairs. Assist and provide technical advice. Building maintenance is a unit that has been produced by JKR to maintain the building from any damaged whether the structure damaged or the other damaged such as the crack on the plaster and many more. For the building that have been handed to client JKR will provide service maintenance for one year only. Students do some site visit to Radio Televisyen Malaysia (RTM) and MAAHAD Johor.



## 2.8 ROAD MAINTENANCE

Road and road maintenance unit have three scope of work. Number one is to plan, design and the construction of road infrastructure. Number two is road maintenance. Road maintenance is important because road is the main route for the public used. Last one is give technical advice to the government at the state and district. Jabatan Kerja Raya have induct consultant for road maintenance job which is Selia Senggara Selatan Sdn Bhd and Teto Engineering Sdn Bhd.



FIGURE 2.8.1

Figure 2.8.1 shows some problem occur on road that is need to be fixed.

## CONCLUSION

For conclusion, students can conclude that it is important to know about all unit in a company. This is because each unit is the backbone of the company. If one unit does not do their work so the company will embrassed. In students opinion, students can got different knowledge in every unit they joined.

## CHAPTER 3

### 3.1 INTRODUCTION

Jabatan Kerja Raya Daerah Johor Bahru provide some technical works and from that a lot of knowledge can be gained. Every unit have their own technical works that can be learn. During industrial training, several technical works have been learned by joining the project.

By joining project students can gain their knowledge about industry. Other than that, students will be expose to real working environment. In this chapter students will express their list of project with explanation as well.



### 3.1 BUILDING UNIT

Building unit is a unit that was responsible to manage and handle the project about building. From the building unit, students have a site visit of “Cadangan Membina Klinik Kesihatan Jenis 3 (KK3) dan Kuarters” at Taman Ungku Tun Aminah, Johor Bahru about piling process.

#### INFO ABOUT THE PROJECT

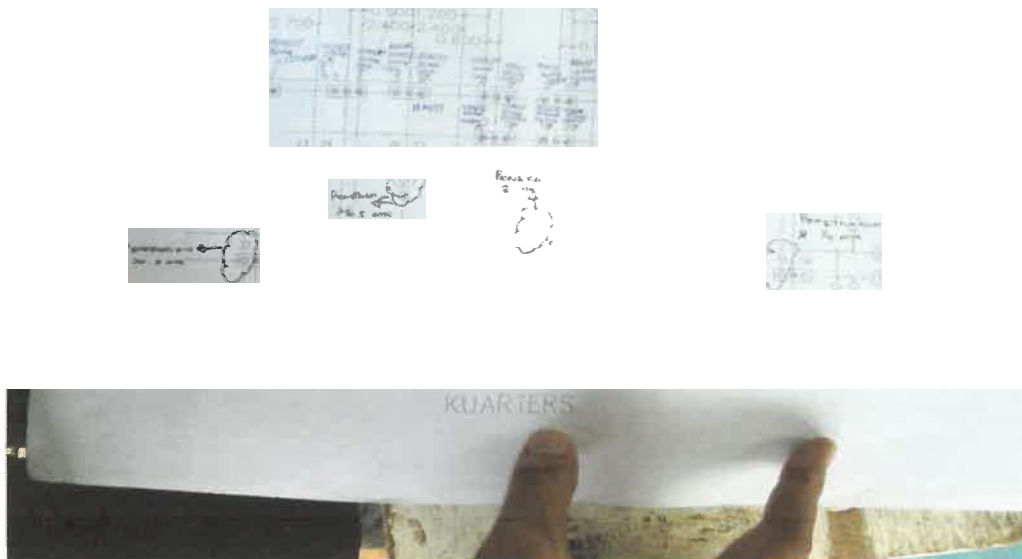
MAIN CONTRACTOR	LARAS NIAGA SDN BHD
COST OF PROJECT	RM 19,080,000.00
PILING WORK COST	RM 1,168,400.00
TIME OF PILING PROCESS	4 WEEKS

**TABLE 3.1.1**

#### TOTAL PILING POINTS

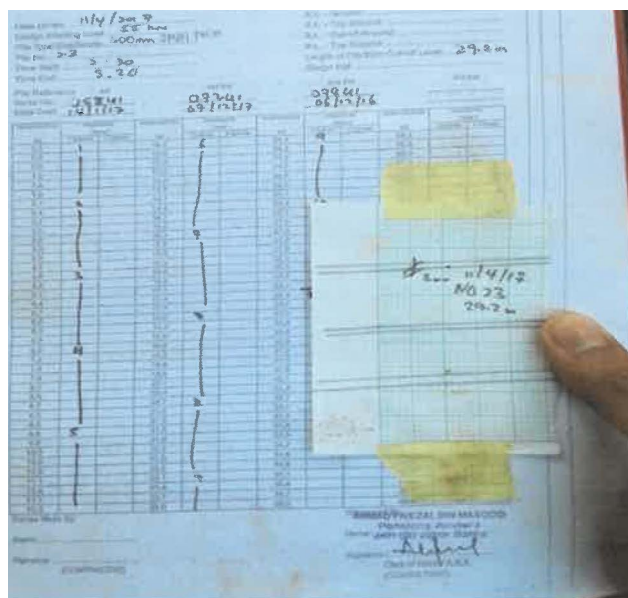
CLINIC	235 POINTS
QUARTERS	68 POINTS
TNB SUBSTATION	28 POINTS
TOTAL POINTS	331 POINTS

**TABLE 3.1.2**



**FIGURE 3.1.3**

This figure shows the number of piling points



**FIGURE 3.1.4**

**Figure 3.1.4** shows the pile has been set. If the pile have been set so the pile must be set three times more according to Jabatan Kerja Raya specification.



**FIGURE 3.1.5**

In this **figure 3.1.5** shows the process to put in the spun pile into the ground. Main factor we choose this type of pile because of the type of soil.



**FIGURE 3.1.6**

**Figure 3.1.6** shows the welding process to conduct the pile with the other pile. It is important because if the pile is not conducted the soil underground will crack and can cause problem to the building in the future.



**FIGURE 3.1.7**

**Figure 3.1.7** show the pile that have been successfully place into the ground.

### 3.2 SPECIAL PROJECT UNIT

At this unit students have join a conventional project which is all the design fully by Jabatan Kerja Raya. This project is one of the project that is handle fully by Jabatan Kerja Raya. Students went to site visit of “Pembinaan Kuarters Dan Dewan Tertutup Bagi Jabatan Imigresen Malaysia At Bandar Baru Uda.

THE FIGURE BELOW SHOW SOME INFORMATION OF THE PROJECT:

DATE OWNED THE SITE	4 <sup>TH</sup> FEBRUARY 2015
COMPLETION DATE	31 <sup>ST</sup> JANUARY 2017
PROJECT DURATION	104 WEEKS
E.O.T NO 1	16 <sup>TH</sup> JUNE 2017
ORIGINAL CONTRACT PRICE	RM 43,980,500.50
CURRENT CONTRACT PRICE	RM41,064,633.08

**TABLE 3.2.1**

NOTES:

E.O.T=Extension of time

## SCOPE OF WORK:

### EARTHWORK:

- Cut and fill of the soil
- Construction of sediment basin
- Construction of crib wall

### STRUCTURAL WORK BY INDUSTRIALIZED BUILDING SYSTEM(IBM), ARCHITECTURE WORK AND PIPING

- Quarters - 14 floor
- Closed hall - 1 floor
- Parking area - 3 floor

### CONSTRUCTION OF ADDITIONAL UTILITIES:

- Electric sub-station
- Garbage house
- Guardhouse



## PROCESS TO PUT THE MAIN WATER SUPPLY PIPE



**FIGURE 3.2.2**

**Figure 3.2.2** shows process of excavation of main water supply pipe.



**FIGURE 3.2.3**

As we can see in **figure 3.2.3**, it is the process of compaction of sand. After the excavation process, the space was filled with the sand about 150 mm and we have to compact it to make sure that the pipe not crack or break.



**FIGURE 3.2.4**

From **figure 3.2.4**, we can see the process to connect the pipe with the pipe that have been placed underground.



**FIGURE 3.2.5**

**Figure 3.2.5** shows the process of welding to connect the pipe with the other pipe that have been placed underground. After the welding process, the pipe will be painted with antirust and then wrap with pipe with special aluminium foil





**FIGURE 3.2.6**

After the pipe has been conducted, about 2 metre of sand have been put into the space and after the sand was put, the process of compaction is done to make sure the sand is fully compact. This is because the surface will be the main road for the transportation to pass through.

### 3.3 BUILDING MAINTENANCE PROJECT

1. Site visit at Radio Televisyen Malaysia (RTM). Jabatan Kerja Raya do this site visit after receive complaints from Radio Televisyen Malaysia due to many crack at their main building.



**FIGURE 3.3.1.1**

This crack as shown in **figure 3.3.1.1** is the corridor at first floor of the main building.



**FIGURE 3.3.1.2**

This crack as shown in **figure 3.3.1.2** is the corridor at second floor of the main building.

2. Site visit at MAAHAD Johor. Due to some structural failure Jabatan Kerja Raya Daerah Johor Bahru receive complaints from the management of this school



**FIGURE 3.3.2.1**

This figure show structural failure that can cause danger to the students that stay at this hostel.



**FIGURE 3.3.2.2**

**Figure 3.3.2.2** show some crack beside the drain. However, based on what the engineer said the crack is only because of earth movement.



**FIGURE 3.3.2.3**

**Figure 3.3.2.3** show some the column at the ground floor that is not merge with each other. This column will be destroyed and the new column will be build and merge with the main column of the building.



### 3.4 ROAD UNIT

Project about “Cadangan Menggantikan Jambatan Sungai Plentong Di Jalan Masai Lama”.



**FIGURE 3.4.1**

This figure shows premix works for temporary road. The length for the temporary road is 150 metre, the width is 7.5 metre and the final thickness is 70 millimetre.



**FIGURE 3.4.2**

**Figure 3.4.2** shows the temperature of the premix before lay which is the premix is on the lorry.



**FIGURE 3.4.3**

This figure show the temperature of the premix after it has been lay. This temperature is taken before the premix being compacted.



**FIGURE 3.4.4**

**Figure 3.4.4** shows the premix is being compacted by a compactor machine name smooth wheel rollers.



### 3.5 ROAD MAINTENANCE

For road maintenance department students have collect some information of pothole



FIGURE 3.5.1

This figure shows the reason why pothole occur



FIGURE 3.5.2

Figure 3.5.2 show the way to repair the pothole. There were two types to repair the pothole which are temporary fillings and permanent fillings

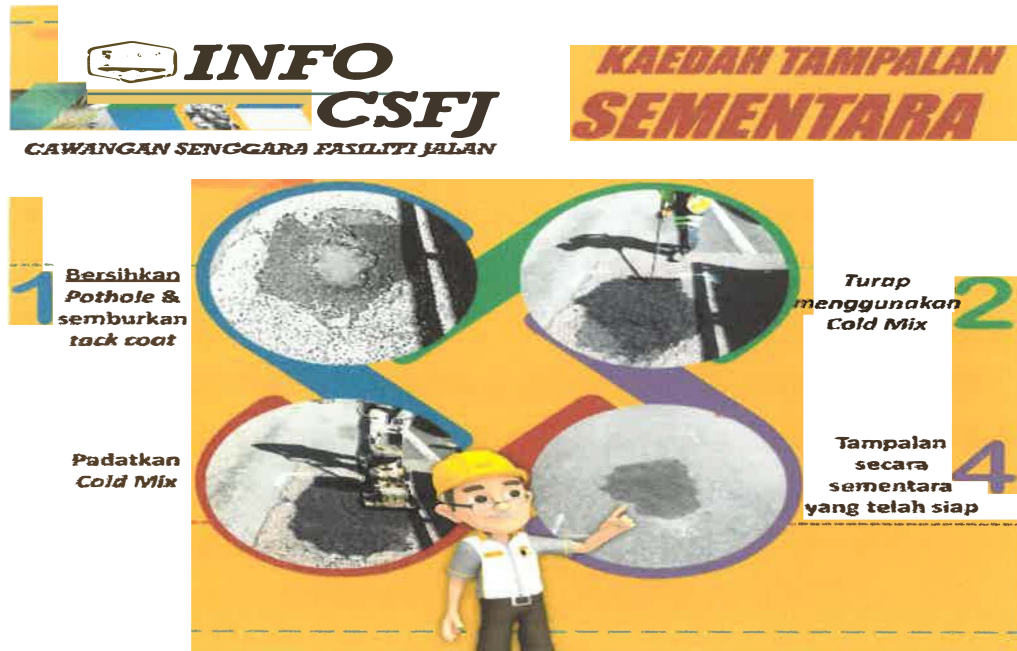


FIGURE 3.5.3

This figure 3.5.3 shows the method to do temporary fillings



FIGURE 3.5.4

This figure 3.5.4 shows the method to do permanent fillings



## CONCLUSION

From the site visit and technical work students have join, they have gain knowledge and more experience about civil engineering. In the class at campus, students only learned on the properties of the concrete by theory and just done for some test on the concrete at the laboratory, but after they have join the concreting work from the reinforcement inspection to the vibrating the concrete, students can more understand and relate the theory that they have learnt with the practical work situations that occur at the sites. In a nutshell, technical work at site was different from technical work at laboratory at the campus. Maybe some of what the students learn can be use at the site but some of it is not suitable to be use at site.

## CHAPTER 4

### 4.1 INTRODUCTION

It was a useful experience doing internship at Jabatan Kerja Raya. The friendly staff help students easy to communicate with them. The space that is created by the trainee allowed the students with full opportunities to learn and know themselves as a worker. This internship has brought out students' skills and their self-confidence. The primary objective of internship is to expose students to the real working life and put their knowledge in practice.

Student experience at Jabatan Kerja Raya Daerah Johor Bahru was highly educative. This is because the student was transferred to a different unit for every week during their internship. In all these units students learn many things which will be helpful in their future.

Students also learn about how important Jabatan Kerja Raya is in Malaysia. In their training they face with a lot of challenges. Students must say that this experience proves that it is important for students to be exposed to the real working life before they finish their study.

## 4.2 LESSON LEARNED

### TECHNICAL SKILLS :

In conclusion, from the industrial training students gained a lot in technical skills. Technical work that students have learnt and involved is concreting work, tiling work, piling work, premix work, compacting road work, reinforcement work and many more. Internship can make students understand in what they have learned in their class at university when they been exposed to the technical work. This is because the theory lesson that students have learnt is related to the technical work. As a conclusion students can conclude that without knowledge so the students cannot gain their technical skills

### COMMUNICATION SKILLS:

After two months of student's industrial training at Jabatan Kerja Raya Daerah Johor Bahru gained their communication skills. Students gained their communication skills during their presentation in front of their faculty lecturer and some of the engineer from Jabatan Kerja Raya Daerah Johor Bahru. We can conclude that internship can improve students communication skills

### SOCIAL:

Social skills is an important skills that is needed to be in each students because with social skills they can easily ask people about what they don't understand. As an example, they can ask question to foreigner about the site. As conclusion, social skills was important not only during their internship but also with all the people in the world

#### 4.3 KNOWLEDGE GAINED

Some knowledge that was improved by students are:

##### CONCRETE WORK:

For concrete work, the students watch by their-self on how the concrete work is do. Based on what they watch, they will know that what they have learn about concrete work during their class is different from concrete work at site.

##### SLUMP TEST:

Slump test is important because before doing the concrete work the concrete must be test by doing slump test to make sure that the workability is suitable for the parts that the concrete will be used. In Jabatan Kerja Raya, they approve if the slump is 80 mm to 105 mm.

##### PILING WORKS:

At the class at university students only learn about theory of piling but during their internship they watched technically the piling works. Students also got a chance to watch the piling works closely by climb up the machine.

##### BAILEY BRIDGE:

In the students class, they were not exposed about the bailey bridge. After joining Jabatan Kerja Raya for internship they can identify two type of bailey bridge which is mabey type and acrow type.

##### PREMIX WORK:

Students learned the premix work and pavement layer during they was being allocated at the Road and Special Project Unit. At university the students does not learn the subject yet. But in this unit they were exposed to premix. As an example, students climb up the premix lorry to take its temperature to make sure that the premix is suitable to use for the making of the road. If in Jabatan Kerja Raya specification, if the premix temperature does not achieve or more than 120 °c so the premix will be rejected

## INSTALLATION PROCESS OF MAIN WATER SUPPLY PIPE:

In this process, students will be exposed on how to install the main water supply pipe underground. This process is important because the pipe is the main pipe for water supply. It's also important to be expose about this because the students will know why the sand were put about 150 mm under the pipe and about 2 metre above the pipe.

## 4.4 LIMITATION AND RECOMMENDATIONS

### RECOMMENDATION TO THE UNIVERSITY

- PERIOD OF INDUSTRIAL TRAINING:

The total period of the industrial training is only 8 weeks which is start from 18<sup>th</sup> April 2017 to 11<sup>th</sup> June 2017. The period of the internship was too short for the students to gain more knowledge from the company. The coordinator of internship may increase the time for internship

### RECOMMENDATION TO THE COMPANY

- ALLOWANCE:

The company should give every student that doing internship in their company. This is because the students can use the allowance money to cover back their money used during the internship.

- MEETING WITH STUDENT:

The Administrative Unit at Jabatan Kerja Raya Daerah Johor Bahru should provide weekly or monthly meeting with the students to ensuring the works of the students. Besides that, the company should provide a comfortable place for students to do their reports and work.

## REFERENCES

1. Mohd Isa Bin Sulaiman  
District Engineer,  
Jabatan Kerja Raya Daerah Johor Bahru.
2. Mohd Azrul Hisham Bin Mahin  
Engineer of Special Project Unit,  
Jabatan Kerja Raya Daerah Johor Bahru.
3. Mohd Fadli Bin Mohd Shahpeai  
Engineer of Building Unit,  
Jabatan Kerja Raya Daerah Johor Bahru.
4. Chin Lee Ling  
Engineer of Building Maintenance Department,  
Jabatan Kerja Raya Daerah Johor Bahru.
5. Ahmad Faiezal Bin Masood  
Asssitant Engineer of Building Unit,  
Jabatan Kerja Raya Daerah Johor Bahru.

## INTERNSHIP CERTIFICATE



### ***SIJIL LATIHAN INDUSTRI***

*Adalah disahkan bahawa*

*MOHAMAD IKHMAL FAIZ BIN IBRAHIM  
(K/P: 970816-35-5267)*

*telah menjalani Latihan Industri dengan jayanya*

*Pada 18.04.2017 hingga 11.06.2017*

*Di Jabatan Kerja Raya Daerah Johor Bahru*

*Saya bagi pihak jabatan ini mengucapkan syabas  
dan maju jaya dalam pelajaran*

*(MOHD ISA BIN SULAIMAN)*

*Jurutera Daerah  
JKR Daerah Johor Bahru*



PEJABAT JURUTERA DAERAH,  
J.K.R. (DAERAH) JOHOR BAHRU,  
677, JALAN PETRIE,  
80100 JOHOR BAHRU.

Telefon : 2223133/39  
Faks : 2223835  
E-mel : jkrjb.gov.my

Ruj. Kami : JKRJ.JB.P.020/211 JLD.12 ( 75 )

Tarikh 16 Jun 2017

Pengarah Kerja Raya Johor  
Pejabat Pengarah Kerja Raya Johor  
Tingkat 4, Bangunan Dato' Abdul Rahman Andak  
79582 KOTA ISKANDAR, NUSAJAYA, JOHOR.

(U.P – Ketua Unit Perhubungan Latihan Industri Seksyen Latihan dan Peperiksaan)

**PERMOHONAN BAYARAN ELAUN PELAJAR INSTITUT PENGAJIAN TINGGI  
YANG MENGIKUTI LATIHAN INDUSTRI DI JKR (D) JOHOR BAHRU.**

Dengan hormatnya perkara di atas dirujuk.

2. Bersama-sama ini dimajukan tuntutan elaun pelatih latihan industri yang telah tamat mengikuti latihan di JKR (D) Johor Bahru.

3. Sehubungan dengan ini, pihak jabatan ini memohon agar pembayaran elaun dapat dibayar dengan sewajarnya kepada tiga (3) orang pelatih industri jabatan ini sebagaimana dibawah:

(Dokumen sokongan disertakan)

BIL	NAMA	RUJUKAN SURAT KELULUSAN
1.	MUHAMMAD NAQIB BIN ROSLE	( ) dlm.JKRJ.P.020/211/1 JIL 49
2.	MOHAMAD IKHMAL FAIZ BIN IBRAHIM	( ) dlm.JKRJ.P.020/211/1 JIL 49
3.	NURSAFA' MAISARA BINTI MOHD ZIN	( ) dlm.JKRJ.P.020/211/1 JIL 49

Sekian dimaklumkan.

Terima kasih.

**“ BERKHIDMAT UNTUK NEGARA ”**



**( MOHD ISA BIN SULAIMAN )**  
Jurutera Daerah  
JKR Daerah Johor Bahru

Sk. Fail Latihan Industri

Fail Timbul

Muhammad Naqib Bin Rosle

Mohamad Ikhmal Faiz Bin Ibrahim

Nursafa' Maisara Binti Mohd Zin

KAD MENGATAP WAKTU						
E NO		NAMA				
KEM/JAB		BAHAGIAN/SEKSYEN				
BULAN						
1	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	TI
2						KEUA
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

AMARAN

Sesapa yang melanggar peraturan ini akan dikenakan tindakan disiplin.

AN DIAKUISAH

12/2/17  
ABIN SULAI  
tera Daerah  
0) Johor Bahru

KEM./JAB.: **JKR (0) JOHOR BAHRU**

BAHAGIAN/SEKSYEN: **L 1**

BULAN: **MAY 2017**

NO	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	TIT KETUA
1	7:49					
2	7:49			817:00		
3	7:42			817:02		
4	7:50			815:34		
5						
6						
7	7:30			817:02		
8	7:42			818:52		
9	7:43			817:08		
10	PUBLIC HOLIDAY					
11	7:48					
12						
13						
14	7:44			817:01		
15	7:48			817:14		

**AMARAN**

Sesiapa yang didapati mengetik kad orang lain, tindakan tatatertib akan diambil keatasnya.

L D SAR

2/5/17

KAD MENCATAT WAKTU

NAMA: **MOHAMMAD IKHMAL**

KEM./JAB.: **JKR (0) JOHOR BAHRU**

BAHAGIAN/SEKSYEN: **L 1**

MOHD ISA BIN SULAIMAN  
Jurutera Daerah  
Kuala Lumpur

BULAN: **MAY 2017**

NO	MASUK	KELUAR	MASUK	KELUAR	KENYATAAN	TIT KETUA
16	7:45			817:02		
17	7:39			817:01		
18	7:43		815:34	815:34		
19						
20						
21	7:44			817:01		
22	7:49			817:02		
23	7:40			818:00		
24	7:37			817:00		
25	7:41		815:31			
26						
27						
28	7:45					
29				816:32		
30	7:41		816:30			
31	7:47			816:31		

**AMARAN**

Sesiapa yang didapati mengetik kad orang lain,

KAD MENCATAT WAKTU

A NO NAMA MOHAMAD ISMAIL

KEM/JAB JKR (D) MAJLIS BAHRU

BAHAGIAN/SEKSYEN L.L.

BULAN JUNE 2017

NO	MASUK	KELUAR	MASUK	KELUAR	KETERANGAN	TIME
1	7:44			8:15:02		
2						
3						
4	11:48			8:15:30		
5	7:45					
6	7:45					
7	7:45			8:15:30		
8	7:48			8:15:00		
9						
10						
11	7:48			8:16:30		
12						
13						
14						
15						

MAKUI SAH

11/6/17

MURAH SULAIMAN  
Daerah  
Bahru

AMARAN

Sesiapa yang didapati melanggar peraturan ini  
tindakan tatatertib akan diambil ke atasnya

PENGESAHAN KEHADIRAN PELAJAR LATIHAN INDUSTRI DI PEJABAT JKR JOHOR  
 Tempoh Latihan Amali: 18/4/2017 - 11/6/2017  
 Bulan yang Dituntut : APRIL & MAY 2017.

Nama  
 No. KIP  
 Unit

MOHAMMAD IKHMAL FAIZ B. IBRAHIM  
 970816-35-5267.  
 JKR CO) UB

Jadual Bulan Kehadiran

Bulan Pertama: APRIL 2017

2	4	5	6	7	9	10	11	12	13	14	15	16		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
/	/	/	C	C	/	C	/	/	/	/	C	C	/	

Bulan Kedua: MEI 2017

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
C	/	/	/	C	C	/	/	/	C	/	C	C	/	/	/
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
/	/	C	C	/	/	/	/	/	C	C	/	/	/	/	

Bulan Ketiga: JUN 2017

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
/	C	C	/	/	/	/	/	C	C						
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

CATATAN:

: Hadir

k Hadir

Hari Sabtu, Ahad dan Kelepasan Am

Bilangan Hari Hadir (a)

Kadar (b)

: RM 15.00 (Sehari)

Nilai ((a) x (b))

: RM

PENGESAHAN KETUA JABATAN

Saya dengan ini mengesahkan bahawa pelajar ini telah hadir pada hari-hari tersebut dan menjalankan tugas-tugas yang diarahkan dan pemberian elaun diberi dengan mengikut Surat Edaran JPA dengan rujukan JPA (L)S175/4-2 bertarikh 24 Ogos 2011 bahawa kadar elaun adalah RM15.00 sehari terhadap maksimum 3 bulan sahaja. Pelajar akan menerima bayaran elaun mengikut hari bekerja sahaja tidak termasuk hari cuti awam/umum/hujung minggu.

Undatangan

Cop Rasmi Pegawai

Tarikh

MOHD ISABIN SULAIMAN

Jurutera Daerah

JKR (D) JOHOR BARU

6/6/17



Cop Pejabat

Dokumen sokongan yang diperlukan adalah salinan kad pengenalan pelajar, surat tawaran penempatan latihan industri, penyata akaun bank dan kad perakam waktu.



MOHAMAD IKHMAL FAIZ B. IBRAHIM



MALINAH AKU SAH

14/6/17  
MOHAMMAD BIN SULAIMAN  
Jurutera Dasah  
JPR(D) MAM

Fakulti Kejuruteraan Awam  
Faculty of Civil Engineering  
Tel : 607-3818309 / 8339 / 8328  
Fax: 607-3818141

UNIVERSITI TEKNOLOGI MARA  
CAWANGAN JOHOR  
Kampus Pasir Gudang, 81750 Masai, Johor.  
Te: 607- 3818000 Fax: 607- 3818141



Surat Kami : 100-UITMKPG (FKA14/3/5)  
Tarikh 6 APRIL 2017

JKR DAERAH JOHOR BAHRU,  
NO.677, JALAN PETRI,  
80100, JOHOR BAHRU,  
JOHOR DARUL TAKZIM

Tuan,

LATIHAN INDUSTRI 18 APRIL-11 JUN 2017, FAKULTI KEJURUTERAAN AWAM,  
UITM CAWANGAN JOHOR, KAMPUS PASIR GUDANG

Nama: :Mohamad Ikhmal Faiz Bin Ibrahim  
No. Kad Pengenalan: :970816 5-5267  
No. Pelajar UITM :201588 858  
Kod Program :EC 110  
Semester :4

**SALINAN DIAKUISAH**

**MOHD ISABIN SULAIMAN**  
Jurutera Daerah  
JKR (D) Johor Bahru


Adalah saya dengan hormat ya memaklumkan bahawa penanda di atas akan melaporkan diri di syarikat Tuan untuk menjalani latihan Industri (L.I) bermula pada **18 April 2017**.

Untuk makluman pihak Tuan, tarikh pelajar untuk melaporkan diri di syarikat di lewatkan sehari daripada tarikh asal iaitu pada 17 April 2017, bagi memberi ruang kepada pelajar untuk membuat persiapan untuk menjalani latihan industri (L.I) kerana tarikh akhir peperiksaan bagi semester ini adalah pada 16 April 2017. Untuk makluman pihak Tuan juga, hampir keseluruhan pelajar Fakulti Kejuruteraan Awam UITM Cawangan Johor, Kampus Pasir Gudang yang akan menjalani latihan industri (L.I) pada bulan April sehingga Jun 2017, mempunyai peperiksaan akhir pada tarikh 16 April 2017 tersebut.

Namun begitu, tarikh akhir latihan industri pelajar ini masih kekal seperti tarikh asal iaitu pada **11 Jun 2017**. Justeru itu, kerjasama daripada pihak Tuan di dalam semua hal yang berkaitan dengan latihan Industri Fakulti Kejuruteraan Awam amat kami hargai dan didahului dengan ucapan jutaan terima kasih.

Sekian,

Yang benar,

  
MOHAMMAD HAZI BIN JAMAL  
KETUA PUSAT PENGAJIAN  
KEJURUTERAAN AWAM (DIPLOMA)  
UITM Cawangan Johor, Kampus Pasir Gudang  
81750 Masai, Johor

Ketua Pusat Pengajian Fakulti Kejuruteraan Awam, UITM Pasir Gudang

**J.K.R. DAERAH**  
JOHOR BAHRU  
**DITERIMA TANGAN**

**06 APR 2017**

<input type="checkbox"/> JF	<input type="checkbox"/> KUK	<input type="checkbox"/> Sila Bincang
<input type="checkbox"/> JP	<input type="checkbox"/> KUB	<input type="checkbox"/> Sila Edarkan
<input checked="" type="checkbox"/> PK	<input type="checkbox"/> PB	<input checked="" type="checkbox"/> Untuk Tindakan
<input type="checkbox"/> KUP	<input type="checkbox"/> PA	<input type="checkbox"/> Untuk Makluman

s.k. 1) Koord.L.I Fakulti Kejuruteraan Awam, UITM Pasir Gudang



5/4/17





PEJABAT PENGARAH KERJA RAYA JOHOR  
ARAS 4, BANGUNAN DATO' ABDUL RAHMAN ANDAK,  
KOTA ISKANDAR,  
79582 ISKANDAR PUTERI,  
JOHOR DARUL TA'ZIM



Tel: 607-2666987 / 2666988  
Faks: 607-2661623 / 1624  
Portal Rasmi: jkr.johor.gov.my  
E-mel: jkrjohor@johor.gov.my

*Sila nyatakan rujukan kami  
apabila menjawab*

Ruj Tuan:

Ruj Kami: ( ) dlm.JKRJ.P.020/211/1 JIL 49

Tarikh:

19 Dis 2016

Koordinator Latihan Industri,  
Fakulti Kejuruteraan Awam  
UiTM Johor Kampus Pasir Gudang, Jalan Purnama  
81750 Masai  
Johor

**J.K.R. DAERAH**  
JOHOR BAHRU  
**DITERIMA**

20 DEC 2016

اسلام عليكم ورحمة الله وبركاته

Tuan,

☐ JF

☐ KUK

☐ Sila Bincang

☐ KUB

☒ Sila Edarkan

☐ PB

☒ Untuk Tindakan

PA) ☐ Untuk Makluman

**KEPUTUSAN PERMOHONAN UNTU MENEMPATKAN PELAJAR MENJALANI LATIHAN INDUSTRI.**

**NAMA**

**MOHAMAD IKHMAL FAIZ BIN IBRAHIM**

**KURSUS**

**DIPLOMA KEJURUTERAAN AWAM ( EC110 )**

**NO.K/P / NO. MATRIK**

**970816-35-5267 / 2015883858**

**SESSI LATIHAN**

**17 APRIL 2017 HINGGA 11 JUN 2017**

Dengan segala hormatnya perkara di atas adalah dirujuk.

2. Sukacita dimaklumkan bahawa permohonan daripada pihak tuan untuk menempatkan pelajar menjalani latihan industri di bawah Pentadbiran Jabatan ini adalah dipersetujui dengan syarat-syarat berikut:-

- Pelajar akan ditempatkan di **JABATAN KERJA RAYA JOHOR BAHRU**.
- Jabatan ini akan **MEMBAYAR / TIDAK MEMBAYAR** elaun kepada pelajar sebanyak **RM 15.00 / HARI MAKSIMA SELAMA 30 HARI BEKERJA** sepanjang tempoh latihan industri pelajar.
- Jabatan ini juga tidak bertanggungjawab sekiranya pelajar tersebut mendapat kemalangan semasa menjalani latihan industri.
- Semasa menjalani latihan industri pelajar hendaklah mematuhi semua arahan dan peraturan jabatan dari masa ke semasa,
- Pelajar hendaklah menjalani latihan mulai **17 APRIL 2017 HINGGA 11 JUN 2017**.
- Pelajar di atas diwajibkan hadir sessi suaikenal dan taklimat peraturan-peraturan Jabatan yang perlu dipatuhi pada tarikh yang akan ditetapkan kemudian.
- Sebarang **pertukaran, pindaan atau pembatalan** hendaklah melalui Pejabat Pengarah JKR(D) Johor Bahru.

**DITERIMA**

21 DEC 2016

UNIT LATIHAN  
(BAH. PENTADBIRAN)  
JKR (D) JOHOR BAHRU

CERTIFIED TO ISO 9001:2008  
CERT NO.: AR4244

CERTIFIED TO ISO 14001:2004  
CERT. NO.: ER0281

**MOHD ISA BIN SULAIMAN**  
Jurutera Daerah  
JKR (D) Johor Bahru

3. Sila ambil perhatian berhubung dengan permohonan untuk menjalani latihan industri, permohonan perlulah dihantar sebulan lebih awal dari tarikh latihan yang ditetapkan.

Sekian saja. Terima kasih

**"BERKHIDMAT UNTUK NEGARA"**

*Hj. Abdull Jalil Bin Othman*

**(HJ. ABDULL JALIL BIN OTHMAN)**

Ketua Penolong Pengarah Pengurusan

b.p. Pengarah Kerja Raya

Johor.

**SALINAN DIAKUISAH**

1) Jurutera Daerah

JKR (D) Johor Bahru.

*[Signature]*

Diminta kerjasama tuan supaya dapat memberi maklumat kepada pelajar tersebut. Sila maklumkan ke Unit Kursus & Latihan, JKR Johor apabila pelajar melapor diri.

*[Signature]* 2/6/17

**MOHD ISA BIN SULAIMAN**

Jurutera Daerah

JKR (D) Johor Bahru

2) Mohamad Ikhmal Faiz bin Ibrahim

Block J-5-1, Quarters IQ

Tanjung Kupang,

81560 Gelang Patah

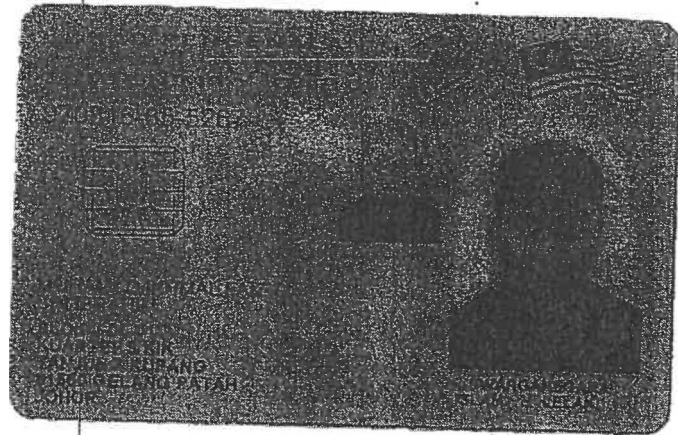
Johor



CERTIFIED TO ISO 9001 : 2008  
CERT. NO : AR424



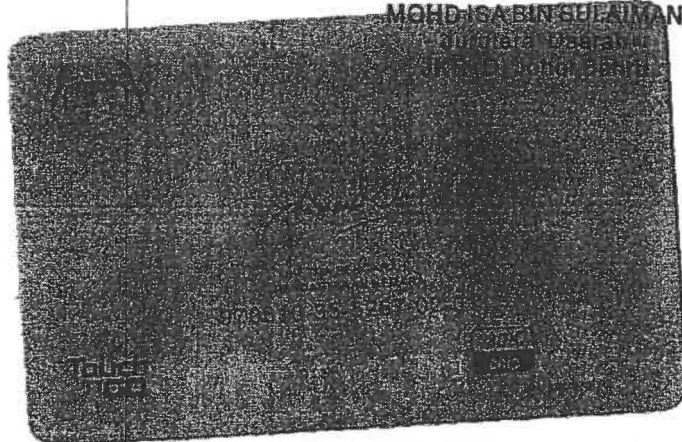
CERTIFIED TO ISO 14001 : 2004  
CERT. NO : ER0281



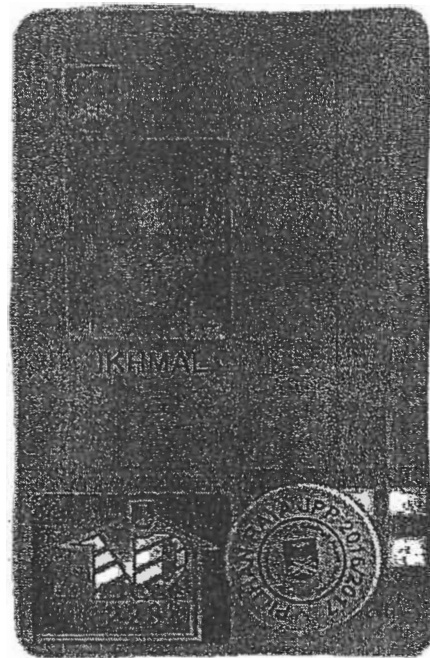
**SALINAN DIAKUISAH**

~~16/8/17~~

**MOHD ISABIN SUFATMAN**



16/8/17



**SALINAN DIAKUI SAH**

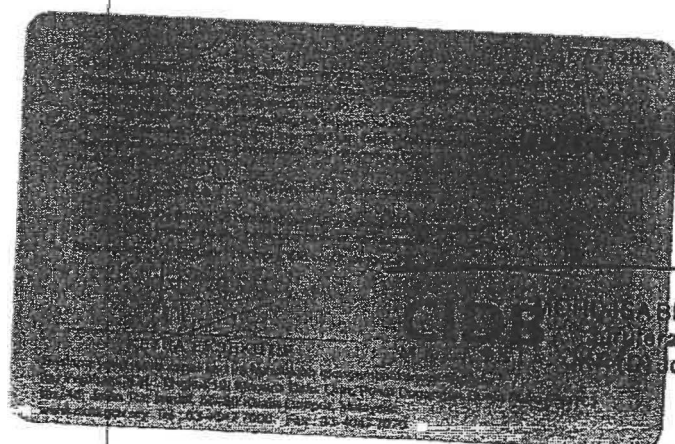
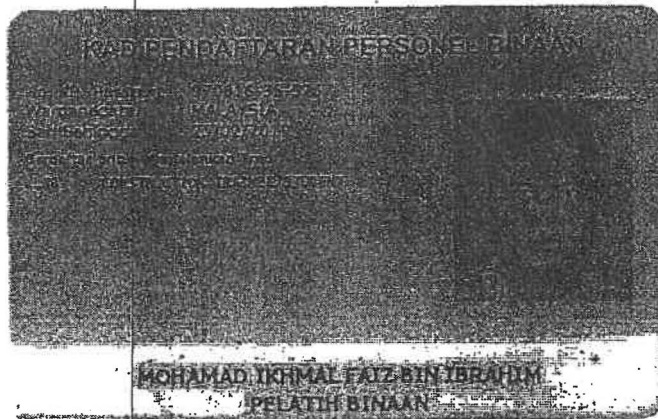
MO AN

urutera Daerah  
JKR (D) Johor Bahru

DATA : NICHARAD HIGARE HIGARE  
NO. SURAT : 20/1000000  
NO. JKR : 20/1000000  
NO. PROGRAM : 20/100  
PROGRAM : DIPLOMA KEMAMPUAN  
PILIHAN : DIPLOMA KEMAMPUAN  
PILIHAN : DIPLOMA KEMAMPUAN  
PILIHAN : DIPLOMA KEMAMPUAN  
PILIHAN : DIPLOMA KEMAMPUAN

Kod ini dikeluarkan oleh untuk pengiraan kod  
- Berapa yang mempunyai kod ini dan berapa kali kod ini  
UNIVERSITI TEKNOLOGI MARA, KAMPUS ALAM TERANG

20/1000000



AKUI SAH

+ 6/8/17

SIN SULAIMAN  
Daerah  
Johor Bahru

## SENARAI TUGAS

No.	Department / Activities
	<b>BAHAGIAN PENTADBIRAN</b>
1	Key in data using MS Excel 2007 & MS Word 2007
2	Go through 'Pekeliling & Perintah Am'
	<b>BAHAGIAN KEWANGAN</b>
3	Go through 'Pekeliling Kewangan', Penyata Kira-Kira Wang Tunai', 'Baucer Bayaran WJP (Persekutuan), & 'Fail Kontrak'
	<b>BAHAGIAN KONTRAK &amp; UKUR BAHAN</b>
4	Sample calculation for Quotations
5	Go through Bill of Quantities
6	Go through Standard Specification books
	<b>BAHAGIAN PENDIDIKAN &amp; JALAN</b>
7	Site Visit
8	Task 1: Difference between slope stabilization and surface protection
9	Task 2: Type of foundation
10	Task 3: Type of piles (Deep & Shallow Foundations)
11	Task 4: Find difference between Spun Pile and RC Pile & Bore Pile and Micropiles
12	Site Visit & Talk on Critical Path Method (CPM) (at Bandar Baru Uda)
13	Task 5: Negative Skin Factor, Contiguous Bore Pile & Structural Capacity and Geotechnical Capacity
14	Site visit (Dewan Gimnastik SMK Temnggong Abdul Rahman 1)
15	Methods to repair and protect concrete

**SALINAN DIAKUI**

↓

+ 5/6/17

MOHD. SABIH SULAIMAN  
Jurutera Daerah  
IKR (D) Joho Bahru

	BAHAGIAN PROJEK BANGUNAN	
16	Site meeting	
17	Supervise Pile Driving Analyser (PDA) Test	<b>SALINAN DI AKUISAR</b>
18	Study on pile load test	<b>h</b> <b>1 8/8/17</b>
19	Study on permeable pavement	<b>MOHD ISARIA SULAIMAN</b> <b>Jurutera Daerah</b> <b>JKR (D) Johor Bahru</b>

**INDUSTRIAL TRAINING PLACEMENT INFORMATION FORM**

*(Borang Matlumat Penempatan Latihan Industri)*

**STUDENT INFORMATION** *(Matlumat Pelajar)*

**UiTM No.** *(No. UiTM)*

**ID No.** *(No. k/p)*

**Semester** *(Semester)* :

**Mobile No.** *(No. h/p)* :

**HEIRS** *(Waris)*

**Mobile No.** *(No. h/p)* : .....

**PLACEMENT OPTIONS** *(Pilihan penempatan)*

**State**  
*(Negeri)*

**City**  
*(Bandar)*

**ORGANIZATION INFORMATION** *(Matlumat organisasi)*

**Contact Person** *(Pegawai yang boleh dihubungi)* :

**Designation (Jawatan)** :

**Phone** *(Telefon)* :

**Fax No.** *(No. Fax)* :

**Mobile No.** *(No. h/p)* :

**Email** *(emel)* :

Office use: Signature *(Tandatangan)*  
Checked by: Date *(tarikh)*

**Approved by:**



UiTM.FKA.LI-02

Surat Kami 100-UiTMKPG(FKA14/3/4)  
Tarikh

Tuan,

**PERMOHONAN PENEMPATAN LATIHAN INDUSTRI BAGI PROGRAM DIPLOMA  
KEJURUTERAAN AWAM (EC110)**

**Nama:**

**No. Kad Pengenalan:**

**No. Pelajar UiTM**

**Program**

**Semester**

2. Saya dengan ini mengesahkan bahawa butir-butir peribadi dan akademik di atas adalah seorang pelajar di Fakulti Kejuruteraan Awam, UiTM , Pasir Gudang.

3. Sukacitanya jika pihak Tuan dapat menerima pelajar tersebut untuk menjalani Latihan Industri untuk tempoh **LAPAN (8)** minggu bermula pada ..... sehingga ..... sebagai pra-syarat untuk lulus. Sebagai makluman, pelajar dilindungi oleh insurans sepanjang tempoh latihan.

4. Jika Tuan bersetuju untuk penempatan pelajar ini, saya memohon jasa baik pihak Tuan untuk memaklumkan kepada pihak saya dengan melengkapkan "Borang Pengesahan Penerimaan" (lampiran UiTM.FKA.LI-04) dalam tempoh **DUA (2)** minggu daripada tarikh surat ini. Jika tidak ada sebarang maklum balas daripada pihak Tuan, permohonan ini dianggap **TIDAK BERJAYA**.

5. Latihan industri yang akan dijalankan selama 8 minggu adalah sangat pendek, tetapi ia sangat bermakna untuk membantu Universiti dalam menghasilkan bakal jurutera yang berdedikasi, cekap dan berdaya saing selepas tamat pengajian.

6. Fakulti Kejuruteraan Awam UiTM Kampus Pasir Gudang amat menghargai kerjasama pihak Tuan dalam semua hal yang berkaitan dengan latihan industri pelajar Fakulti Kejuruteraan Awam UiTM Kampus Pasir Gudang.  
Terima kasih.

Yang benar,

Koordinator Latihan Industri  
Fakulti Kejuruteraan Awam  
UiTM Cawangan Johor  
Kampus Pasir Gudang.

s.k 1 Ketua Pusat Pengajian Kejuruteraan Awam, UiTM Pasir Gudang



### PERSONAL DETAILS

**Name** :Mohamad Ikhmal Faiz Bin Ibrahim  
**Identification No.** :970816-35-5267  
**Date of Birth** :16<sup>th</sup> August 1997  
**Place of Birth** :Hospital Seberang Jaya,Pulau Pinang  
**Age** :19 years old  
**Sex** :Male  
**Marital Status** :Single  
**Race** :Malay  
**Religion** :Islam  
**Citizenship** :Malaysian  
**Postal Address** :Block J-5-1,Quarters CIQ,Tanjung Kupang,81560 Gelang Patah,Johor  
**Mobile Phone No.** :0137065124  
**E-mail** :faizikhmal1997@gmail.com

### EDUCATIONAL BACKGROUND

Year / Period	Institution	Level	Achievement / Award
2004-2006	Sekolah Kebangsaan Bagan Jermal,Butterworth,Pulau Pinang	Primary	-
2006-2009	Sekolah Kebangsaan Kompleks Sultan Abu Bakar,Gelang Patah,Johor	Primary	UPSR
2010-2012	Mara Junior Science College Pontian,Johor	Secondary	PMR
2013-2014	Mara Junior Science College Batu Pahat,Johor	Secondary	SPM

**EXTRA-CURRICULAR ACTIVITIES**

Year / Period	Programme / Activity	Location	Participation
2013	Jambori MRSM Se-Malaysia	Mara Junior Science College Tun Ghazali Shafie,Pahang	Participant
2014	Rugby Open 10's MJSC Muar	Mara Junior Science College Muar,Johor	Participant
2014	15'5 Mssd Batu Pahat	SMK Penghulu Saat,Batu Pahat	Participant
2015	Kejohanan Liga Bolasepak 9 Sebelah Piala Penolong Rektor	UITM Johor Kampus Pasir Gudang,Johor	Participant
2016	Karnival Sains dan Teknologi Islam	UITM Johor Kampus Pasir Gudang,Johor	Participant

**WORKING EXPERIENCE**

Year / Period	Organisation	Designation	Responsibilities
2 months	My News.com	-	Cashier

**SKILLS**

Language skills :	Language	Written	Speaking
	Bahasa Malaysia	Good	Good
	English	Moderate	Moderate

Computer Literacy: Microsoft Word,Power Point,Auto Cad

**HOBBIES**

No.	Description
1.	Reading
2.	Playing Futsal
3.	Surfing Internet

**ACADEMIC REFERENCE**

Name : Narita Bt Noh  
 Designation :Lecturer  
 Organization :Faculty Civil Engineering,  
 UITM Pasir Gudang  
 Tel.No :019-9541350  
 E-mail :naritanoh@johor.uitm.my

UiTM.FKA.LI-04

Rujukan Kami : 100-  
UiTMKPG(FKA14/3/4)  
Tarikh

Koordinator Latihan Industri  
Fakulti Kejuruteraan Awam  
UiTM Johor Kampus Pasir Gudang,  
Jalan Purnama 81750 Masai Johor.  
(u/p: **Mohamed Khatif Tawaf**, mohdkhatif@johor.uitm.edu.my)  
Fax: 07-3818141

**PENGESAHAN PENERIMAAN PELAJAR EC110 UNTUK LATIHAN INDUSTRI TAHUN .....**

Merujuk kepada surat/faks Tuan yang bertarikh ..... adalah disahkan pihak kami **\*menerima / tidak menerima** pelajar Tuan bernama ..... dan nombor pelajar ..... untuk menjalani latihan industri mulai ..... hingga ..... **(8 minggu)** di organisasi /syarikat kami.

**Butiran Latihan:**

**Tarikh melaporkan**

**Masa melaporkan**

**Alamat melaporkan /  
ditempatkan**

---

---

---

Kami juga bersedia untuk menyediakan kemudahan berikut\*\*:

	<b>Ada</b>	<b>Tiada</b>
1. Penginapan		
2. Pengangkutan		
3. Makanan dan minuman		
4. Elaun bulanan		
5. Kemudahan lain (sila nyatakan jika ada):		

Sekian, terima kasih.

Yang benar,

**(NAMA DAN COP ORGANISASI/SYARIKAT)**

Sila faks / emailkan kembali surat ini kepada Fakulti Kejuruteraan Awam, UiTM Pasir Gudang selewat-lewatnya 2 minggu dari tarikh surat permohonan ini.

\* Potong mana tidak berkenaan.

\*\*sila tandakan (√) bagi yang berkaitan

**Fakulti Kejuruteraan Awam**  
Faculty of Civil Engineering  
Tel : 607-3818309 / 8339 / 8328  
Fax: 607-3818141

**HOR**  
Kampus Pasir Gudang, 81750 Masai, Johor.  
Te: 607- 3818000 Fax: 607- 3818141

UiTM.FKA.LI-05

Our Reference: 100-UiTMKPG(FKA14/3/4)  
Date:

To:  
Industry Training Coordinator,  
Faculty of Civil Engineering  
Universiti Teknologi MARA  
Cawangan Johor Kampus Pasir Gudang  
Jalan Purnama 81750 Masai Johor

Dear Sir / Madam

**INDUSTRIAL TRAINING REPORT DUTY VERIFICATION  
SESSION .....**

The above matter is referred.

Please be informed that the following students has reported for Industrial Training to our company / organization on \_\_\_\_\_ (completed by the company/ organization) as stated.

**STUDENT NAME**

**STUDENT NO.**

**ID NO.**

**PROGRAMME**

**SEMESTER**

**REPORT DATE**

**INDUSTRIAL TRAINING ADDRESS**

**DURATION / PERIOD**

Thank you.

Yours sincerely,

{Signature and Company /Organization Stamp}



**CURRENT LOCATION INFORMATION FORM**  
**(Borang Matlumat Penempatan Semasa)**

**STUDENT INFORMATION** *(Matlumat Pelajar)*

<b>Name</b> <i>(Nama)</i>	<b>UiTM No.</b> <i>(No. UiTM)</i>
<b>Programme</b> <i>(program)</i>	<b>ID No.</b> <i>(No. k/p)</i>
<b>Session</b> <i>(sesi)</i>	<b>Semester</b> <i>(Semester)</i> :
<b>Address</b> <i>(alamat)</i> :	
<b>Phone</b> <i>(Telefon)</i>	<b>Mobile No.</b> <i>(No. h/p)</i> :
<b>Email</b> <i>(emel)</i>	

**ORGANIZATION INFORMATION** *(Matlumat organisasi)*

<b>Name</b> <i>(Nama)</i>	
<b>Address</b> <i>(alamat)</i> :	
<b>Contact Person</b> <i>(Pegawai yang boleh dihubungi)</i> :	
<b>Signature</b> <i>(Jawatan)</i>	<b>Mobile No.</b> <i>(No. h/p)</i> :
	<b>Email</b> <i>(emel)</i> :

Signature *(Tandatangan)*

Date *(tarikh)*

Kindly mail this form to the Faculty of Civil Engineering, UiTM Pasir Gudang via fax/post/email within a week to:

Industry Training Coordinator,  
Faculty of Civil Engineering  
Universiti Teknologi MARA  
Cawangan Johor Kampus Pasir Gudang  
Jalan Purnama 81750 Masai Johor

Office use:

Checked by:

Approved by:

(u / p: Mohamed Khatif Tawaf, fax to: 607-3818141 or email: mohdkhatif@johor.uitm.edu.my)

**INDUSTRIAL TRAINING STUDENT PLACEMENT REPORT**  
**(Report Evaluation Form)**

**A) Student Information**

Name

Programme

Session

Date of Commencement

UiTM No.

ID No.

Semester

Date of Completion

**B) Organization Information**

Organization

Name of Supervisor: \_\_\_\_\_

Designation \_\_\_\_\_

**C) Faculty Supervisor Information**

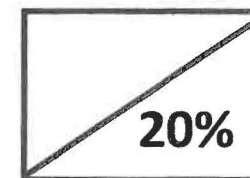
Name

**D) Marks**

No.	Criteria	CO1-PO5	TOTAL MARKS
1.	Abstract	/5	
2.	Introduction	/5	
3.	Report content	/5	
4.	Conclusion and Recommendation for Industrial Training	/5	
5.	Writing Quality	/5	
CO-PO MARKS		/25	/25

Signature & Official Stamp  
(Faculty Supervisor)

Date



Report Evaluation Form



No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
1.	<b>Abstract</b> Summary of: • Training that has been undertaken • Lesson learnt from the training. (CO1 – PO5)	<input type="checkbox"/> Training and lesson learnt are described clearly	<input type="checkbox"/> Training and lesson learnt are described with substantial clarity	<input type="checkbox"/> Training and lesson learnt are described satisfactorily	<input type="checkbox"/> Training and lesson learnt are described with minimal clarity	<input type="checkbox"/> Fail to describe training and lesson learnt
2.	<b>Introduction</b> • Background of Organization • Scope of Work Covered • Report Organization. (CO1-PO5)	<input type="checkbox"/> Clear description of content	<input checked="" type="checkbox"/> The content is described with clear substantially	<input type="checkbox"/> The content is described with moderate clarity	<input type="checkbox"/> The content is described with minimal clarity	<input type="checkbox"/> Fail to describe the content
3.	<b>Report content</b> • Tasks carried out • Problems encountered • Problem solving Approach • Lesson learnt (CO1-PO5)	<input type="checkbox"/> All elements are clearly described	<input type="checkbox"/> Tasks, problems encountered and problem solving approach are clearly described but lesson learnt is missing	<input type="checkbox"/> Tasks and problems encountered are clearly described but problem solving approach is not clearly described	<input type="checkbox"/> Tasks are clearly described but problems encountered is not clearly described	<input type="checkbox"/> Tasks are not clearly described

\*Please tick (✓) at appropriate scale



No.	Criteria	5 (Excellent)	3 (Satisfactory)	2 (Average)	1 (Weak)
4.	<b>Conclusion and Recommendation for Industrial Training</b> <ul style="list-style-type: none"> <li>Conclude the findings of Industrial Training</li> <li>Evaluations on outcomes of training &amp; suitability of the placement.</li> </ul> (CO1-PO5)	<input type="checkbox"/> Able to conclude & evaluate the training outcomes & placement clearly	<input type="checkbox"/> Able to conclude & evaluate the training outcomes & placement with substantial clarity	<input type="checkbox"/> Able to conclude and evaluate the training outcomes & placement with moderate clarity	<input type="checkbox"/> Able to conclude & evaluate the training outcomes & placement with minimal clarity  <input type="checkbox"/> No conclusion on the achievement of training & provide no evaluations on both training outcomes & placement
5.	<b>Writing Quality</b> <ul style="list-style-type: none"> <li>Writing Style</li> <li>Plagiarism as stated in UiTM Policy</li> </ul> (CO1-PO5)	<input type="checkbox"/> The report is well organized and supported with sufficient and relevant information	<input type="checkbox"/> The organization of the report is good and supported with substantial evidence	<input type="checkbox"/> The organization of the report is good and supported with satisfactory evidence	<input type="checkbox"/> The organization of the report is satisfactory with minimal support  <input type="checkbox"/> The report is poorly organized and lacked of supporting evidence

\*Please tick (✓) at appropriate scale

Percentage earned from Report =  $\frac{\text{Total Marks Earned from Report}}{25} \times 20\%$

=                      %

**For Faculty Supervisor Response**

- i. Would you **recommended** this workplace for future Industrial Training Student ☐ Yes ☐ No
- ii. If **NO**, please specify the reason

.....

**INDUSTRIAL TRAINING LOGBOOK**  
**(Logbook Evaluation Form)**

**A) Student Information**

Name

Programme

Session

Date of Commencement

UiTM No.

ID No.

Semester

Date of Completion

**B) Organization Information**

Organization

Name of Supervisor:

Designation

**C) Faculty Supervisor Information**

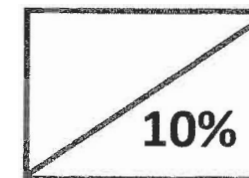
Name

**D) Marks**

No.	Criteria	CO1-PO5	TOTAL MARKS
1.	Verification from supervisor	/5	
2.	Attendance	/5	
3.	Technical content	/5	
4.	Allocate problems & analysis	/5	
CO-PO MARKS		/20	/20

Signature & Official Stamp

Date



Logbook Evaluation Form

UiTM.FKA.LI-08

**UNIVERSITI TEKNOLOGI MARA**  
**CAWANGAN JOHOR**  
 Kampus Pasir Gudang, 81750 Masai, Johor



No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
1.	Verification from supervisor. (CO1 – PO5)	<input type="checkbox"/> More than 9 signatures	<input type="checkbox"/> At least 9 signatures	<input type="checkbox"/> At least 8 signatures	<input type="checkbox"/> At least 7 signatures	<input type="checkbox"/> Less than 7 signatures
2.	Attendance. (CO1-PO5)	<input type="checkbox"/> 100%	<input type="checkbox"/> At least 90 %	<input type="checkbox"/> At least 80 %	<input type="checkbox"/> At least 50 %	<input type="checkbox"/> Less than 50 %
Attendance must be at least 40 days including public holidays (if attendance is less than 40 days, the student will fail unless the Industrial Training with a legitimate reason)						
3.	Content at least 80% engineering technical with additional technical specification (drawing, design calculation, picture and safety awareness). (CO1-PO5)	<input type="checkbox"/> All elements are clearly stated with evidence.	<input type="checkbox"/> Engineering and technical specification are described but some details are missing	<input type="checkbox"/> Engineering and technical specification are described but major details are missing	<input type="checkbox"/> Engineering content is described but technical specification is not clearly described	<input type="checkbox"/> Engineering content is not clearly described
4.	Allocate problems & analysis to formulation & solution to real life. (CO1-PO5)	<input type="checkbox"/> Able to allocate problems & analysis related to real life and clearly described	<input type="checkbox"/> Able to allocate problems & analysis related to real life but minor description are missing	<input type="checkbox"/> Able to allocate problems & analysis related to real-life but major description are missing	<input type="checkbox"/> Able to allocate problems & analysis related to real-life but not clearly described	<input type="checkbox"/> Unable to allocate problems & analysis related to real-life.

\*Please tick (✓) at appropriate scale

Percentage earned from Logbook =  $\frac{\text{Total Marks Earned from Logbook}}{20} \times 10\%$

= %

Logbook Evaluation Form

**PROGRESS REPORT FOR INDUSTRIAL TRAINING**  
**(Industrial Supervisors Evaluation Form)**

**A) Student Information**

Name

UiTM No.

Programme

ID No.

Session

Semester

Date of Commencement

Date of Completion

**B) Organization Information**

Organization

Name of Supervisor:

Designation

**C) Faculty Supervisor Information**

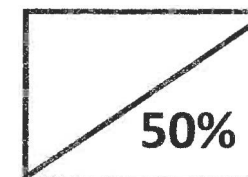
Name

**D) Marks**

No.	Criteria	CO1-PO5	CO2-PO8	CO3-PO4	CO4-PO2	TOTAL MARKS
1.	Attendance verification	/5				
2.	Punctuality and Attitude	/5				
3.	Quality of work	/5				
4.	Learning capability		/5			
5.	Application of knowledge		/5			
6.	Co-operation			/5		
7.	Discussion with supervisor/co-workers				/5	
8.	Communication Ability				/5	
9.	Oral and written presentation skills			/5		
10.	Organization skills				/5	
11.	Scope of work and relate to theoretical knowledge	/5				
12.	Safety	/5				
<b>CO-PO MARKS</b>		<b>/25</b>	<b>/10</b>	<b>/10</b>	<b>/15</b>	<b>/60</b>

Signature &amp; Official Stamp

Date



Industrial Supervisors Evaluation Form



No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
1.	Attendance verification (CO1 – PO5)	<input type="checkbox"/> Constantly verified by supervisor.	<input type="checkbox"/> Satisfactory verified by supervisor.	<input type="checkbox"/> Moderately verified by supervisor.	<input type="checkbox"/> Fairly verified by supervisor.	<input type="checkbox"/> No verification by supervisor.
2.	Punctuality and Attitude. (CO1-PO5)	<input type="checkbox"/> Punctual with outstanding adherence to rules and regulations	<input type="checkbox"/> Punctual with good adherence to rules and regulations	<input type="checkbox"/> Punctual with satisfactory adherence to rules and regulations	<input type="checkbox"/> Moderate punctuality with minimal adherence to rules and regulations	<input type="checkbox"/> Poor punctuality and unable to adhere to rules and regulations
3.	Quality of work (task assigned). (CO1-PO5)	<input type="checkbox"/> Accomplish the tasks before the deadline with no correction	<input type="checkbox"/> Accomplish the tasks on time with no correction	<input type="checkbox"/> Accomplish the task on time with minimum correction	<input type="checkbox"/> Able to accomplish part of the tasks with delay	<input type="checkbox"/> Fail to accomplish tasks assigned
4.	Learning capability. (CO2-PO8)	<input type="checkbox"/> Demonstrate outstanding measures and proactive learning capability	<input type="checkbox"/> Able to act and learn with minimum supervisions	<input type="checkbox"/> Able to learn with supervisions	<input type="checkbox"/> Able to learn with substantial supervision	<input type="checkbox"/> Unable to learn despite with supervision
5.	Application of knowledge. (CO2-PO8)	<input type="checkbox"/> Excellent demonstration of theoretical knowledge application at work place	<input type="checkbox"/> Able to apply substantial amount of theoretical knowledge at work place	<input type="checkbox"/> Able to apply acceptable amount of theoretical knowledge at work place	<input type="checkbox"/> Able to apply minimal theoretical knowledge at work place	<input type="checkbox"/> Unable to apply theoretical knowledge at work place
6.	Co-operation (CO3-PO4)	<input type="checkbox"/> Very proactive in giving co-operation	<input type="checkbox"/> Always give full co-operation when required	<input type="checkbox"/> Always give satisfied co-operation	<input type="checkbox"/> Give less co-operation	<input type="checkbox"/> Fail to show any cooperation at all
7.	Frequency of discussion with supervisor/co-workers. (CO4-PO2)	<input type="checkbox"/> At least 8 times	<input type="checkbox"/> At least 6 times	<input type="checkbox"/> At least 4 times	<input type="checkbox"/> At least twice	<input type="checkbox"/> Never have any discussion
8.	Communication Ability. (CO4-PO2)	<input type="checkbox"/> Able to communicate effectively with co-workers	<input type="checkbox"/> Able to communicate with co-workers	<input type="checkbox"/> Able to communicate satisfactorily with co-workers	<input type="checkbox"/> Poor communication with co-workers	<input type="checkbox"/> Unable to communicate with co-workers

No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
9.	Oral and written presentation skills. (CO3 – PO4)	<input type="checkbox"/> Able to express and present very fluently and very convincing.	<input type="checkbox"/> Able to express and present fluently and convincing.	<input type="checkbox"/> Able to express and present quite fluently and quite convincing.	<input type="checkbox"/> Able to express and present clearly but with minimum fluently.	<input type="checkbox"/> Unable to express and present clearly and lack of fluency.
10.	Organization skills in individual and group effectiveness and its activity. (CO4-PO2)	<input type="checkbox"/> Well-explained on background and workplace activity	<input type="checkbox"/> Substantial explanation on background and workplace activity	<input type="checkbox"/> Acceptable explanation on background and workplace activity	<input type="checkbox"/> Able to explain background and workplace activity with minimal clarity	<input type="checkbox"/> Unable to explain background and workplace activity
11.	Ability to explain scope of work and relate to theoretical knowledge. (CO1-PO5)	<input type="checkbox"/> Well-explained the scope of work and able to relate to theoretical knowledge	<input type="checkbox"/> Substantial explanation on the scope of work and able to relate to theoretical knowledge	<input type="checkbox"/> Acceptable explanation on the scope of work with minimal relationship to theoretical knowledge	<input type="checkbox"/> Minimal explanation on the scope of work with minimal relationship to theoretical knowledge	<input type="checkbox"/> Unable to explain the scope of work and fail to relate to theoretical knowledge
12.	Safety. (CO1-PO5)	<input type="checkbox"/> Always adhere to safety requirements	<input type="checkbox"/> Adhere to safety requirements most of the time	<input type="checkbox"/> Adhere to safety requirements satisfactorily	<input type="checkbox"/> Minimal adherence to safety requirements	<input type="checkbox"/> Unable to adhere To safety requirements

\*Please tick (✓) at appropriate scale

Percentage from Progress Report =  $\frac{\text{Total Marks Earned From Progress Report}}{60} \times 50\%$

=                      %

Industrial Supervisors Evaluation Form

**PROGRESS REPORT FOR INDUSTRIAL TRAINING**  
**(Faculty Supervisors Evaluation Form)**

**A) Student Information**

Name

UiTM No.

Programme

ID No.

Session

Semester

Date of Commencement

Date of Completion

**B) Organization Information**

Organization

Name of Supervisor:

Designation

**C) Faculty Supervisor Information**

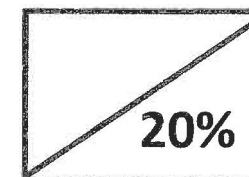
Name

**D) Marks**

No.	Criteria	CO1-PO5	CO2-PO8	CO3-PO4	CO4-PO2	TOTAL MARKS
1.	Attendance verification	/5				
2.	Punctuality and Attitude	/5				
3.	Quality of work	/5				
4.	Learning capability		/5			
5.	Application of knowledge		/5			
6.	Co-operation			/5		
7.	Discussion with supervisor/co-workers				/5	
8.	Communication Ability				/5	
9.	Oral and written presentation skills			/5		
10.	Organization skills				/5	
11.	Scope of work and relate to theoretical knowledge	/5				
12.	Safety	/5				
<b>CO-PO MARKS</b>		<b>/25</b>	<b>/10</b>	<b>/10</b>	<b>/15</b>	<b>/60</b>

Signature & Official Stamp  
 (Faculty Supervisors)

Date



Faculty Supervisors Evaluation Form



No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
1.	Attendance verification (CO1 – PO5)	<input type="checkbox"/> Constantly verified by supervisor.	<input type="checkbox"/> Satisfactory verified by supervisor.	<input type="checkbox"/> Moderately verified by supervisor.	<input type="checkbox"/> Fairly verified by supervisor.	<input type="checkbox"/> No verification by supervisor.
2.	Punctuality and Attitude. (CO1-PO5)	<input type="checkbox"/> Punctual with outstanding adherence to rules and regulations	<input type="checkbox"/> Punctual with good adherence to rules and regulations	<input type="checkbox"/> Punctual with satisfactory adherence to rules and regulations	<input type="checkbox"/> Moderate punctuality with minimal adherence to rules and regulations	<input type="checkbox"/> Poor punctuality and unable to adhere to rules and regulations
3.	Quality of work (task assigned). (CO1-PO5)	<input type="checkbox"/> Accomplish the tasks before the deadline with no correction	<input type="checkbox"/> Accomplish the tasks on time with no correction	<input type="checkbox"/> Accomplish the task on time with minimum correction	<input type="checkbox"/> Able to accomplish part of the tasks with delay	<input type="checkbox"/> Fail to accomplish tasks assigned
4.	Learning capability. (CO2-PO8)	<input type="checkbox"/> Demonstrate outstanding measures and proactive learning capability	<input type="checkbox"/> Able to act and learn with minimum supervisions	<input type="checkbox"/> Able to learn with supervisions	<input type="checkbox"/> Able to learn with substantial supervision	<input type="checkbox"/> Unable to learn despite with supervision
5.	Application of knowledge. (CO2-PO8)	<input type="checkbox"/> Excellent demonstration of theoretical knowledge application at work place	<input type="checkbox"/> Able to apply substantial amount of theoretical knowledge at work place	<input type="checkbox"/> Able to apply acceptable amount of theoretical knowledge at work place	<input type="checkbox"/> Able to apply minimal theoretical knowledge at work place	<input type="checkbox"/> Unable to apply theoretical knowledge at work place
6.	Co-operation (CO3-PO4)	<input type="checkbox"/> Very proactive in giving co-operation	<input type="checkbox"/> Always give full co operation when required	<input type="checkbox"/> Always give satisfied co-operation	<input type="checkbox"/> Give less co-operation	<input type="checkbox"/> Fail to show any cooperation at all
7.	Frequency of discussion with supervisor/co-workers. (CO4-PO2)	<input type="checkbox"/> At least 8 times	<input type="checkbox"/> At least 6 times	<input type="checkbox"/> At least 4 times	<input type="checkbox"/> At least twice	<input type="checkbox"/> Never have any discussion
8.	Communication Ability. (CO4-PO2)	<input type="checkbox"/> Able to communicate effectively with co-workers	<input type="checkbox"/> Able to communicate with co-workers	<input type="checkbox"/> Able to communicate satisfactorily with co-workers	<input type="checkbox"/> Poor communication with co-workers	<input type="checkbox"/> Unable to communicate with co-workers

## COURSE OUTCOMES – PROGRAMME OUTCOMES MATRIX

COURSE CODE	ECM376	CENTRE OF STUDY	CEPM											
COURSE NAME	INDUSTRIAL TRAINING	PREPARED BY	HAMIDAH											
CREDIT HOURS	4.0	DATE	MAR-13											
	TAXONOMY LEVELS		PROGRAM OUTCOMES											
OUTCOMES (use verbs according to taxonomy)	COURSE	COGNITIVE	PSYCHOMOTOR	AFFECTIVE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	ASSESSMENT
1. Practice good working ethics and quality delivery of project undertaken.				I					√					Academic Advisor (Placement Report and Logbook Evaluation Form) Industrial and Faculty Supervisors. (Industrial and Faculty Supervisors Evaluation Forms)
2. Exhibit pleasant interpersonal skills as an individual in working independently, collaborative and in multi-disciplinary team.				III								√		Industrial and Faculty Supervisors. (Industrial and Faculty Supervisors Evaluation Forms)
3. Practice good organizational skills in enhancing individual and group effectiveness and productivity.				IV				√						Industrial and Faculty Supervisors. (Industrial and Faculty Supervisors Evaluation Forms)
4. Exhibit good communication with fellow workers and supervisors in issues related to projects undertaken.				II		√								Industrial and Faculty Supervisors. (Industrial and Faculty Supervisors Evaluation Forms)

**Program outcome for EC110**

PO2 – Ability to communicate effectively, not only with engineers but also with the public (A)

PO4 – Ability to act effectively as an individual and as group with leadership capabilities (A)

PO5 – Understanding of the social, cultural, global, environmental responsibilities, ethics and the needs for sustainable development (A)

PO8 – Ability to function in multidisciplinary teams (A)