



UNIVERSITI TEKNOLOGI MARA

FACULTY OF CIVIL ENGINEERING

INDUSTRIAL TRAINING REPORT

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JULY 2019



INDUSTRIAL TRAINING STUDENT PLACEMENT REPORT
 (Report 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 :

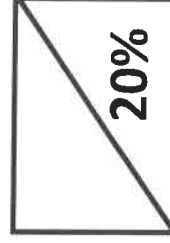
C) Faculty Supervisor Information

Name :
 D) Marks :

No.	Criteria	CO1-PO5	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





No.	Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
1.	Abstract Summary of; <ul style="list-style-type: none"> • 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.	Introduction <ul style="list-style-type: none"> • Background of Organization • Scope of Work Covered • Report Organization. (CO1-PO5)	<input type="checkbox"/> Clear description of content	<input 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.	Report content <ul style="list-style-type: none"> • 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)	4 (Good)	3 (Satisfactory)	2 (Average)	1 (Weak)
4.	<p>Conclusion and Recommendation for Industrial Training</p> <ul style="list-style-type: none"> Conclude the findings of Industrial Training Evaluations on outcomes of training & suitability of the placement. (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.	<p>Writing Quality</p> <ul style="list-style-type: none"> Writing Style Plagiarism as stated in UJTM Policy (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 = Total Marks Earned from Report X 20%

= 25 %

For Faculty Supervisor Response

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

.....

ABSTRACT

This report represents the input that I got during the Industrial Training. This report contains the task that I had assigned during internship in department of Civil Engineering, Unit Pengurusan Fasilitas UITM Cawangan Pulau Pinang Kampus Permatang Pauh(UITM PP).

During Industrial Training, I also learn how to communicate with other staffs and the etiquette during a meeting with contractor. I also know new practical members during this internship and manage to share knowledge with them.

I also know the environment of working area in engineering field when I do the internship in Unit Pengurusan Fasilitas . Based on the experience that I have gain, I was able to identify several recommendations that might be useful for university, company and future interns.

ACKNOWLEDGEMENT

In the name of Allah, Most gracious, Most Merciful. Thanks to Allah for the sake of His bounty that I can successfully implement this industrial training according to the stipulated time.

First of all, I would like to express my deepest appreciation to all those who provided me the possibility to complete the report. A special gratitude I give to my Industrial Supervisor, Mr Mohd Firdaus Bin Mohd Akhbar, whose contribution in stimulating suggestions and encouragement, helped me to coordinate my Industrial Training.

In addition, this opportunity I would like to extend my gratitude to our lectures and colleagues at UiTM Kampus Pasir Gudang for helping and giving tutoring and sharing experiences during training. Also, do not forget to my beloved family who has provided support and assistance during this Industrial Training.

Finally, I would also like to acknowledge with much appreciation to the all Facility UITM PP staffs, which give me knowledge and gave the permission to involve in every task that Unit facility assigned. I hope this report gets the blessings from Him and hopefully all the information in this report will help students in the future.

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CHAPTER 1

INTRODUCTION

Chapter 1.0 : Introduction

1.1 Introduction

The purpose of the trainee to undergo this industrial training is to fulfil the essential requirements to complete themselves after obtaining a UiTM diploma in Johor.

Every student at Universiti Teknologi Mara (UiTM) who is studying in Civil Engineering is required to undergo Industrial Training for 8 weeks. These are the requirement set by UiTM management and the designated Industrial Training period is 8 weeks for the minimum period to undergo training. All students will be given this period to undergo Industrial Training at any their own firms or as determined by the management of UiTM.

1.2 Background of the Company



BAHAGIAN PENGURUSAN FASILITI UITM KAMPUS PENANG

Facility UITM PP logo

History of Unit Pengurusan Fasiliti UITM PP.

The Facility Management Office was established in 1972, and was then known as the Office of Local Engineers. The Office of Local Engineers was renamed the Development and Maintenance Division in 1982. In 1994, the Development and Maintenance Division became known as the Office of Development and Maintenance.

On September 15, 1995, the Office of Development and Maintenance was separated under a separate head of administration. This is because the functions of

the Development Office and the Maintenance Office are expanding. Both departments are located directly under the Chancellery Office. In August 1999, ITM was declared the University of Technology MARA and this development has made the Office of Maintenance a broader role as the Office of Management is directly involved in the development, development, and progress of the MARA University of Technology.

In strengthening the vision of the University of Technology MARA the direction of becoming a global institution of public education in the restructuring and rebranding of the Office of Maintenance was made on January 4, 2006 and officially transferred to the Facility Management Office.

The MARA University Faculty of Technology Facility Office of the Permatang Pauh Campus Branch is divided into several units consisting of Administration Unit, Council Unit, Project Unit, Public Unit, Electrical Unit and Mechanical Unit.

Objectives

As the Key Consultant to the Malaysian Government, the objectives of the Public Works Department are to: "Delivering products and implementing timely maintenance, quality and cost of maintenance services to achieve optimum asset benefits".

- Provides optimum comfort to staff and students.
- Ensure maintenance is carried out from time to time in accordance with campus requirements.
- There is no compromise in terms of safety and quality

The objectives from industrial training to students are:

- Increase and expand technical knowledge and student's skill.
- To expose students to the real working world.
- Create awareness and increase interest among students to study.
- To enable students to relate the theories to practical.

- Applying the security regulations in the industry.
- To build the confidence level to the students.
- To absorb the spirit of teamwork and build a good communication among employees.
- Provide a formal report after completing the industrial training

Mission

"Enhance facility management and optimize the use of professional assets through best practices and technologies to provide a conducive and dynamic education, learning and research infrastructure for the University."

Vision

"Becoming a professional bumiputra facilities management organization in line with the University's vision."

1.3 Organizational Structure

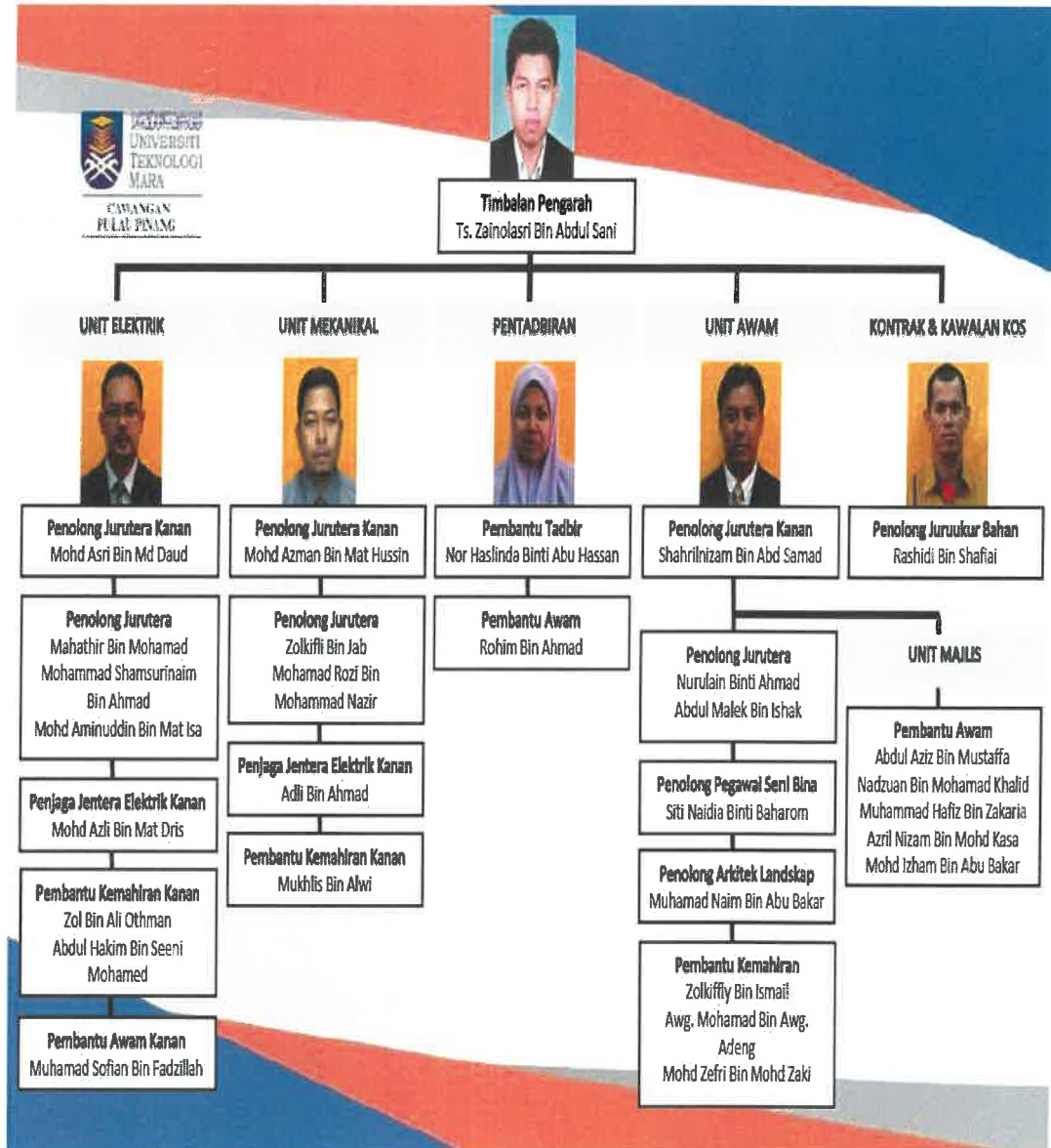
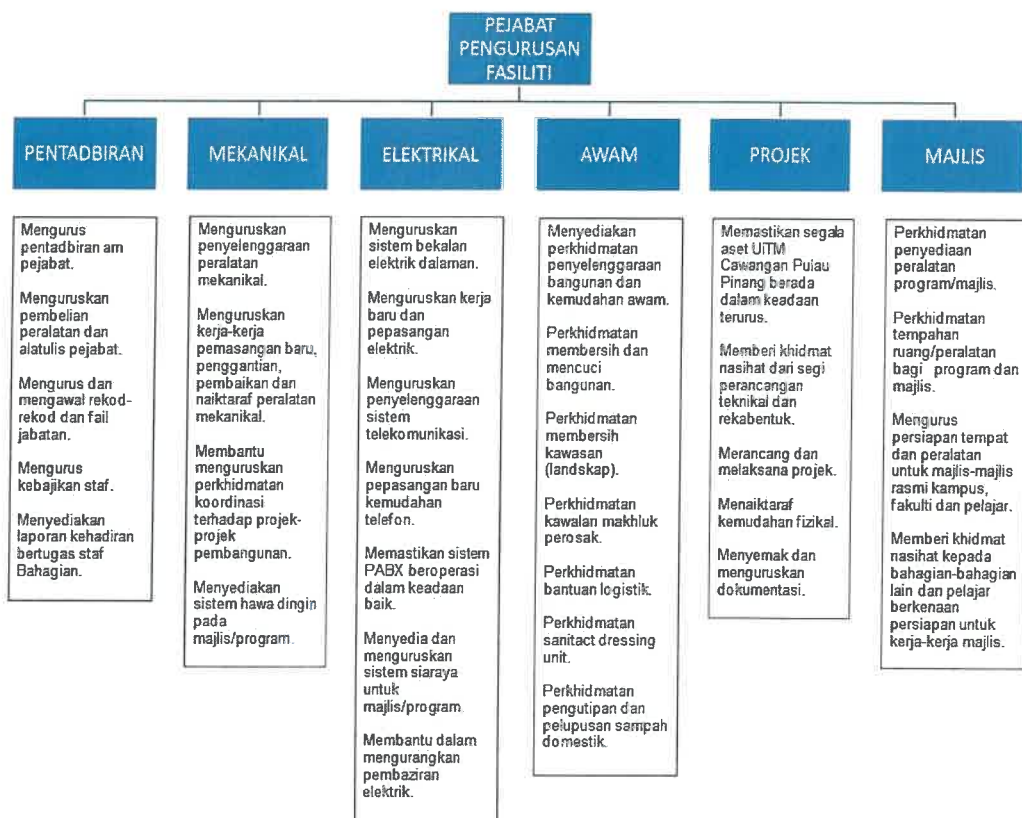


Figure 2 : Organizational Structure



1.4 Nature of Business

Unit Pengurusan Fasiliti UITM PP contributes to the development of the country through:

- To assist customers in delivering policy and service outcomes through strategic partner co-operation
- Standardization of processes and systems for the sake of delivering consistent results
- Providing effective and innovative asset and project management
- Developing human capital and new competencies
- Build harmonious relationships with the community

- Preserving the environment in service delivery

1.5 Products

NO	DATE AWARDED	EXPECTED COMPLETION	PROJECT
1	10.09.19	2019	Kerja-kerja cuci karpet di Dewan Besar UITM Cawangan Pulau Pinang akibat paip pecah di ruang.
2	2.06.19	2019	Membekal dan menggantikan tangki air 'Suction Tank' Storage Tank, Make Up Tank, termasuk Motor & Pam dan Panel kawalan elektrik di bangunan Kompleks Perdana, Mekanikal, Hotel dan Kolej Baiduri UITM PP
3	4.09.19	2019	kerja-kerja menyelenggara saluran lantai tersumbat di Kolej Kristal A

1.6 Market Strength

1.6.1 Scope of work in Project Management

Implementing Civil project for Government agencies ranging from planning, designing, managing tenders / contracts, supervising and coordinating all civil department project and other services projects

1.6.2 Scope of work in Maintenance Management

- **Damage Maintenance**
Implement maintenance-related activities for civil parts and other services based on complaints received from customers.
- **Preventive Maintenance**
Conduct regular maintenance activities on civil equipment at government agencies.

1.6.3 Scope of work in Advisory Service

- **Technical Consultancy Services**
Provide technical consultancy services especially with regard to technical problems faced by government departments and agencies.
- **Inspectorate Service**
To provide civil inspection services at all government premises and to provide feedback as a result of the inspection for customer inquiries for further action.

1.6.4 Scope of work in Administrative Services

Implementing affairs related to staff, finance, and information technology. The main activities involved are managing general administration, finance, human resources, documentation and information technology development.

1.7 Conclusion

Unit Fasilitas UITM PP is a company with high potential to be more advanced. This is because based on the experience, the achievements and commitments shown by them. I think that this company is perfect for students to do industrial training. Apart from giving us the opportunity to do variety of jobs, they also gave us a sincere and full guidance so that we would not return empty-handed. I hope to work with them again in the future.

CHAPTER 2 :
TRAINING ATTENDED

Chapter 2 : Training Attended (weekly summary based on logbook)

2.1 Introduction

This section is the summary of the training which was from 15 July 2019 until 6 September 2019. This summary is only about the routine activity during the training period not about the deep explanation on the activity. This summary is very important because it shows the activities or training done by student within training period.

2.2 Exposure Level

1st week

Register on the first day of training at Bahagian Pengurusan Fasilitas UITM Cawangan Pulau Pinang Kampus Permatang Pauh . Safety briefing and was introduced to each task/work by En Shahrilnizam..

In this week, I have follows the cleaning staff which is Pn Naidia to what works need to do in cleaning parts.

Next, I have a task by Pn Naidia which is need to check cleaning work . I need to go every block that have in UITM PP to check the cleaning worker. What task I need to is the attitude of cleaning worker which is must do the work during work time and need to care about attire. In cleaning parts, we need to check all about cleaning progress every day to make sure the worker do their work.

Other than that , we were learn about PPE SYSTEM which stand for Personal Protection Equipment by En Shahrilnizam and he should explain about site daily report function which is as a proof there is any work is down.

We were should go site visit at SUKSIS building which have a new project for the installation the flagpole.

I was follow to the HEP office for their renovation. I need to measure length, height and width of table and partition needed for renovation. We also need to give an idea

for their layout on that renovation. Other than that I need to draw the layout plan of the arrangement of partition and table on that office room.



Installation flagpole



2nd week

I have a task by Pn Naidia which is need to check cleaning work . I need to go every block that have in UITM PP to check the cleaning worker. What task I need to is the attitude of cleaning worker which is must do the work during work time and need to care about attire. In cleaning parts, we need to check all about cleaning progress every day to make sure the worker do their work.

Next, I follow for visit main tank UITM PP which has a big problem cracker. On that I was explained by En Shahril and En Malik what is the problem on the main tank. From their opinion the cracker mybe because the designation is not to suitable or humanship problem.

I was join for site briefing and site visit the new project renovation studio at Block Delima. On this project there only use mechanical and civil department only. Other than that I do the report for company performance analysis for a lot of agency.



Main tank UITM PP

3rd week

I have follow En Jefri and En Malik to repair the doorknob at Pusat Islam, repairing flushing system at Hotel Management building and repairing clogged pipe at Kompleks Perdana level 2(pumping drainage and discharging materials causing injury). I learn about replace stocked at man and ladies toilet at block ANET level 4. Next, I follow for checking water proving at SUKSI Building. I do the cement paste near cracked area in man toilet at level 2 SUKSIS building. I was follow to check water proving at Kolej zamrud and learn about the problem on that building. I should follow for the maintenance process clogged sewage tank at kolej Kristal A.



Clogged pipe and drainage



Repairing doorknob



Clogged Sewage tank



Water proving

4th week

I was learn with En Awang about lift system and maintenance at level 10 kolej Kristal A. He was explain about piping system that use in kolej UITM PP which is use ABS pipe(Akrilonitril Butadiena Stirena). He explain about their ABS advantages and disadvantages. From their opinion the ABS system must cause a lot of problems for maintenance works.

Next, I follow for site briefing and site visit for proposed work on supplying, istalling and preparing bird nets, changing ceiling places and related work on the Block BKBA level 4.

Other than that, I was follow Pn. Ain and En Shahril for visit and measure the area need for office kolej kristal renovation. From this project they need to add 1 private room with door and grill on the office and enlarge the office. So they need to remove and added the new partition with mirror on that project. They had need to add grill on the computer room and meeting room.

After that I was learn with Pn Ain about how make a Bill Of Quantity (BQ) for this project. I was calculate the measurement and type on the Microsoft word and then transfer it into Bill Of Quantity (BQ). I need to check the prices of material use with JKR standard BQ and enter it on BQ and then calculate the total prices for check the UITM budget for this project.

5th week

I learn about how to get tender which is the contractor must presence to the meeting(site briefing). After that the contractor must be make sure the important document complete which is bank statements must have 10% from the budget placed, CIDB approvment and need to complete the bill of quantity provided in the quotation document.

Next, I I follow for site visit Block Delima which for the project renovation Office Kolej Delima to Cultural Room and Caunseling room.

6th week

I was fax the reporting of company performance to the involved which is JKR Seberang Perai Utara ,Pejabat Tanah dan Daerah , Pejabat Pendidikan Daerah SIRIM bhd, JKR Barat Daya and Pejabat Pembangunan Persekutuan.

Next, I was Photostat/ copy the quotation document for the proposed roof and waterproofing repair works as well as related works in the hotel management building.

7th week

I follow for site visit project at Kolej Nilam which is for anew tender cleaning work. I had to follow site briefing and site visit projects of water proofing and drainage system at transformer room at Hotel Management Building level 1.

Next I do the Bill of Quantity (BQ) for standard price UITM and compare with another company for the project public damage repair services at kolej of zone A and zone B UITM Cawangan Pulau Pinang Kampus Permatang Pauh.

I had join En Malik for repairing the clogged sink at chemical laboratory level 3 Kompleks Perdana.

8th week

I was measure the area needed for the work to provide pedestrian access and student traffic at UITM PP. I need to compare the measurement that I have measure with the Bill of Quantity (BQ) that have been prepared by En Naim.

Next, I was follow En Malik And En Jefri to check and repair clogged bath tab at Hotel Management building level 2 room 203. I was learn about budget UITM for civil department and explanations about concrete creaking and fall at Kompleks Perdana and building in UITM PP From the explanations about this problem, the cracking and concrete fall is because the uses of sea sand in mixing concrete(based on USM research). Salt content in sand can melt the iron. So the concrete have been fail because the iron was molten (sea sand not to suitable for mixing concrete).

Next, I follow for site visit transformer room at Kolej Baiduri for water proving problem. I were measure the beam at staircase Kolej Intan.

I should learn about flush valve toilet and piping system at Kolej Kristal B by contractor from Nibong Aktif Enterprise. I follow to do the maintenance work at Kolej Kristal B.



Concrete fall



creaking concrete



New product replace stairs

2.3 Conclusion

Based on the summary written, it is clear that trainee learnt a lot of new things, knowledge and experience. Even though the scope of the work is a little bit rare for a diploma student who has not yet learn any courses related to traffic, yet, it is a very valuable experience one could gain. It is important for students to know what in the field they are applying for before choosing any company to complete the training because it does affect people's emotion and focus during working.

CHAPTER 3 :
TECHNICAL REPORT

Chapter 3.0 : Technical Report

3.1 Introduction

Unit Pengurusan Fasiliti UITM PP is more related to maintenance services. It also have more department on this maintenance works which department of electrical, mechanical and civil. The most popular in maintenance is civil department which should every day have an complaint of damage.

3.2 Problem Encountered and How to Overcome It

The problem encountered during working in this field is I need to do Bill Of Quantity for project even though I haven't studied at class before this. I gain at the end of the day of working. Industrial Training has really taught me to be prepared for the future. Working is never easy. What makes it easy is that when we love our job and respect everyone around us. I also experienced a feelings of the week ends very fast when we are working.

I also have an problem when I working at Unit Fasiliti UITM PP which is I also forget to used AutoCAD for drawing layout and plan. But in this cases I was try hard to study and learn newly for how to used this programmer/application. And finally I were remember and know how to use this AutoCAD.

Next, it is quite adventurous and dangerous when it comes to the site to do survey where trainee and engineer have to face the heavy traffic. Engineering is a job that is synonym with the Triple D - Dangerous, Dirty, Difficult. Engineers can not escape from the Triple D. However, going to site is an exciting job to be done because trainee got the chance to learn something out of their comfort zone and challenge themselves to do something challenging or even thrilling. Mental and mindset are the element that trainee used to overcome these difficulties.

Adapting ourselves in a new environment is also one of the most challenging problem that trainee had experienced when she needs to deal with a lot of kind of people around her. Somehow, it could harm someone if it is not controlled. Some

colleagues could be very kind and helpful, some could be vice versa. However, it is important for a worker to concentrate or be focus on fulfilling his targets, aims, and jobs. What do workers need to do is to act positively and work professionally without mixing any personal problems with our professions. This is how do trainee need to apply too to overcome this sort of problem.

3.3 Experience gained

Something happened to someone and it affects his/her life and feelings, it is called as experience. That is what happened to me whilst I was doing my industrial training in Facility UITM Permatang Pauh. I gained good and bad experience, practically and morally.

Practically, I had learned by pass system from the contractor. This is system that be used to save the time. In this project the contractor cannot detect where the leaking pipe occurs. If, hacking the wall it use a lot of money and time so to close the report as soon as possible the contractor decide to used by pass system. They are many advantage used by pass system which is it will easy for the next contractor to make the maintenance after this.

In the other hand, personally, I enjoyed it when I had this training with my internship fellow from same UITM . We worked hard together as a team and keep supporting each other. The environment of the company itself boosts my spirit to do the job greatly. Despite the flexibility we have in time, the punctuality showed by the seniors engineers and the staffs there has taught me to become one professional worker to show that how serious are we as an engineer. The seniors there are sincere when it comes to teaching and mentoring us. They would explain from A to Z to make sure that I gain something when I finished my internship there.

One of the bad experiences I had during working is the fact that I can never escape the exhaustion I gain at the end of the day of working. Industrial Training has really taught me to be prepared for the future. Working is never easy. What makes it easy is that when we love our job and respect everyone around us. I also experienced a feelings of the week ends very fast when we are working.

3.4 Conclusion

In this chapter, I learned that experience is a crucial element that could lift us into the next level of life where it teaches us to become a stronger and better person. So, we should never take it for granted. We should always cherish every second in our life. Be grateful when good things happened to us and when it comes to bad things, again, be grateful because experience is the best teacher.

CHAPTER 4 :
CONCLUSION

Chapter 4: Conclusion

4.1 Introduction

In this last chapter, it is about the conclusion made within the 8 weeks of working in Unit Fasilitas UITM PP. Other than that, it will tell the knowledge gained by trainee, the suitability of the organization and limitations and recommendations.

4.2 Lesson learned

Industrial Training is a good course for a student as it teaches us a lot of lessons directly or indirectly. During internship, I pushed myself to be a brave person to deal with the seniors and staff even though I had a severe anxiety problem. I learned that we need to be punctual especially when it comes to a process of completing a grouping task. Other than that, it is important for us to always respect everyone around us without taking into consideration of who are they. In an organization, teamwork is also the most important element when doing the job in order to produce the best results.

Technically, I learned few skills of using software which are related in the scope of traffic and transportation such as Sidra, Microsoft Excel, Coral Draw, I-plan, Google Earth and Wikimapia. I also learned that engineering is not only about buildings and constructions. Engineering is a work that involves safety and convenience.

4.3 Knowledge Gained

From the first day until the last day of my training, I gained valuable knowledge that I think I could not simply gained from anywhere else. . Other than that, I learned that in a working place, I always have to be ready, punctual, tolerate and be responsible. I have not learned about structure design and Bill Of Quantity in pass semester course in the university but learning new terms in civil course is also one of the good knowledge that I gained before I learn it in the class. This could become a good start for me once I enter the class someday.

4.4 Suitability of Organization

Based on this Industrial Training, I suggest for every staffs and workers in one organization manage to work together and be professional instead take personal matter into works. The reason is it will make the task or project that had been assigned being delayed and the quality of work drop just because the workers cannot work in team.

I also thought that other employees' ideas should be listening and be considered. It also will raise employees' self-esteem to give opinion from their view.

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