UMS
UNIVERSITI MALAYSIA SABAH

INDUSTRIAL TRAINING HANDBOOK

(FACULTY OF ENGINEERING)

Revision: July 2020

FACULTY OF ENGINEERING (FKJ)
UNIVERSITI MALAYSIA SABAH (UMS)

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Section 1: Introduction

1.1 Overview

Industrial Training is a compulsory course for all bachelor's degree students of the following engineering programs:

- HK01 - Civil Engineering
- HK02 - Electrical and Electronic Engineering
- HK03 - Chemical Engineering
- HK08 - Mechanical Engineering
- HK20 - Electronic Engineering (Computer)
- HK88 - Oil and Gas Engineering

The industrial training course is one of the graduating requirements stipulated by the Malaysia's Engineering Accreditation Council (EAC) and Malaysian Qualification Agency (MQA). The statistics of industrial training by program and locations, and companies that provide placement for our engineering undergraduates are listed in Appendix A and B, respectively.

1.2 Status and Credit Hour

The Industrial Training course carries **five (5) credit hours**. It is compulsory for engineering undergraduates who have completed at least six (6) semesters at the Faculty of Engineering (FKJ). Registration for this course must be done in conjunction with the other courses in the sixth semester of their respective academic programs. The industrial training must be conducted before the final semester.

Upon completion of this course, each student will be graded with **Pass with Distinction (*Lulus dengan Cemerlang*)**, **Pass (*Lulus*)** or **Fail (*Gagal*)** to indicate the level of achievement during industrial training, as shown in Table 1.1. This grade, however, will not contribute to the student's Cumulative Grade Point Average (CGPA).

Table 1.1: Standard Grading Scheme for Industrial Training

Marks	Grade	Description
0 - 49	G (Fail)	Did not complete the training and/or plagiarism of report writing
50 - 89	L (Pass)	Exhibit satisfactory behaviour during the training, and satisfactory logbook and report writing.
90 - 100	LC (Pass with Distinction)	Exhibit excellent characteristics during training, excellent technical report writing, and able to apply knowledge at work (shown in logbook)

1.3 Duration

The minimum duration of Industrial Training is **ten (10) weeks** at any relevant engineering department in a private organisation or a government agency. However, should the company requests for a longer period, the **approval of extension is to be decided by FKJ Academic Committee, with recommendation from the Industrial Training Committee**.

1.4 Course Outcomes (COs)

In this course, students are expected to apply their knowledge and skills to complete their tasks and exhibit the attainment of the relevant course outcomes through daily conversation, assigned tasks, presentation, meeting logs and report. Table 1.2 shows the course outcomes and mapping to program outcomes (POs) for all engineering programs in FKJ.

Table 1.2: Industrial Training's Course Outcomes (CO) and relationship to Program Outcomes (PO) with their respective method of assessment

Course Outcomes (COs)	**Program Outcomes (POs)**												**Assessment Method**
	PO1 : Engineering Knowledge	**PO2** : Problem Analysis	**PO3** : Design/Development of Solutions	**PO4** : Investigation	**PO5** : Modern Tool Usage	**PO6** : Engineer & Society	**PO7** : Environment & Sustainability	**PO8** : Ethics	**PO9** : Individual & Team Work	**PO10** : Communication	**PO11** : Project Management & Finance	**PO12** : Life Long Learning	
CO1 An ability to carry out tasks and responsibilities ethically								✓					Industrial supervisor assessment
CO2 An ability to cooperate and work effectively in a team									✓				Industrial supervisor assessment
CO3 An ability to articulate technical knowledge/ information/ideas										✓			Industrial supervisor assessment
CO4 An ability to write technical documents / reports related to their work										✓			Academic supervisor assessment - Logbook (technical) & report (technical)
CO5 An ability to utilize relevant technical resources for the completion of task												✓	Academic supervisor assessment - Report (format & referencing)
CO6 An ability to manage the implementation of project or task on time											✓		Industrial supervisor assessment

Section 2: Procedure of Industrial Training

2.1 Industrial Training Procedure

The industrial training procedures are divided into three stages below;

i. Before the industrial training,
ii. During the industrial training, and
iii. After the industrial training.

These procedures are elaborated in more detail in the following subsections. Figure 2.1 shows a flowchart that summarizes the procedure.

2.1.1 Before the Industrial Training

i. Student are required to attend the Industrial Training briefing conducted by their respective Industrial Training Committee.

ii. Student must complete the Student Registration Form (LI - 1) online in FKJ LI system.

iii. Student holds the full responsibility to get placement in any relevant industry or government body. The responsibility includes the following activities:

   a. Preparation of curriculum vitae (CV)

   b. Registration of Industrial Training course in SMP and FKJ's LI system within a specified time (before the week-3 of the registered semester)

   c. Application of suitable industrial training placement using an official cover letter from FKJ within a specified time (before the week-11 of the registered semester)

   d. Obtain approval and confirmation from the Industrial Training Committee and upload the offer letter onto the FKJ's LI system (before the week-13 of the registered semester)

   e. If the application is unsuccessful, the student will need to apply for another industrial training placement (before the week-11 of the registered semester)

iv. Each application for the industrial training placement will be monitored by FKJ Industrial Training Committee. Student **is not allowed to change** their industrial training placement after obtaining confirmation from the Industrial Training Committee.

2.1.2 During the Industrial Training

i. Student and his/her Industrial Supervisor must complete the Industrial Training Commencement Form (LI – 2), when reporting for duty. The student and his/her industrial supervisor must discuss and develop an Industrial Training Plan throughout the training (see Appendix D). The completed form and Industrial Training Plan must be submitted online by the student to the Industrial Training Administration within 7 days from the commencement date of the industrial training.

ii. Student must prepare an A4 size hardcover logbook to record daily activities in the format specified (Please refer to Appendix D for further examplery details). The Industrial Supervisor must certify the logbook, either daily or weekly.

iii. Visitation by lecturer:

- The Industrial Training Committee will arrange the date on which the Visiting Lecturer will visit the organization.
- Upon the visit, the student must prepare and present the following documents;
    i. Logbook,
    ii. Training schedule,
    iii. LI-3A (for visiting lecturer) and LI-3B (for industry supervisor) forms.
    iv. LI-3D form via online (by student)
- If the visit is not possible, a telephone interview or video conferencing must be arranged between the lecturer, student and industrial supervisor.

iv. At 8th week of training, student should request his/her Industrial Supervisor to fill in the LI-4B form, either via online form or via email.

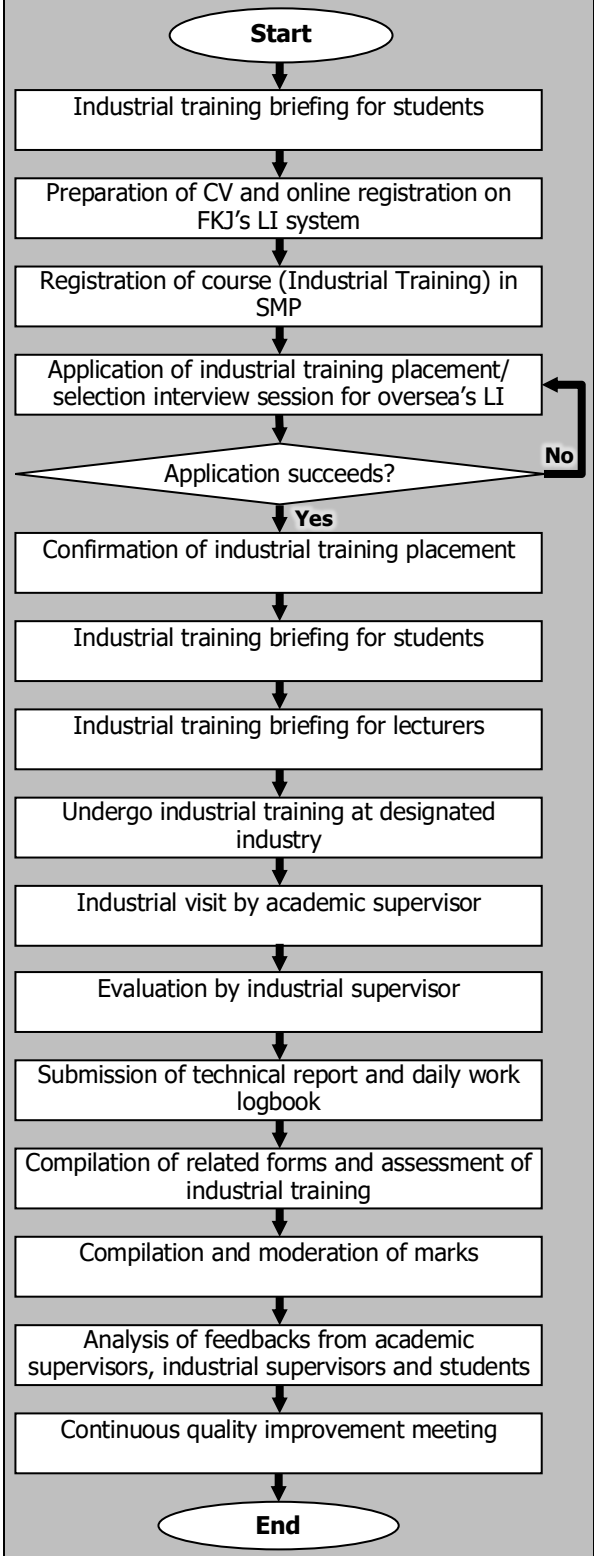
v. Students are not allowed to change their industrial training placement while in training.

2.1.3 After the Industrial Training

i. Upon completion of the industrial training, student must submit each of the following documents to the FKJ Industrial Training Administration on the first Monday of the following semester;

    a. Industrial Training Technical Report,
    b. Logbook,
    c. LI-4A and LI-5 forms

ii. If any of these documents are incomplete, marks will be deducted from the final assessment.



Action By and Tentative Timeline	Recipient	Form
FKJ LI Committee (week 10-12, sem. 5)	Student	
Students (week 13-14, sem. 5)	LI Administrator	LI-1 form (LI System)
Students (week 1-3, sem. 6)	UMS Academic Services Division (BPA)	SMP course registration
Student, LI Coordinators & selection committee (week 1-12, sem. 6)	Industrial Companies	LI system
LI Coordinator & Committee (week 1-14, sem. 6)	Industrial Companies & Students	
LI Committee (week 1-14, sem. 6)	Students	
LI Program Coordinator (week 12-14, sem. 6)	Students	
LI Coordinator (week 14, sem. 6)	Visiting Lecturer	
Students (Week 1, LI period)	LI Administrator	LI-2 form
Visiting Lecturer & Students (Week 5-8, LI period)	LI Administrator	LI-3A, LI-3B, & LI-3D forms
Industrial supervisor (Week 8-10, LI period)	LI Administrator	LI-4B form
Students (Week 1, sem. 7)	LI Administrator	LI-5 form
Lecturer & LI Coordinator (Week 1-2, sem. 7)	LI Administrator	LI assessment form
LI Admin and Committee (Week 3, sem. 7)	Unit Akademik	Grade analysis PK07
FKJ Industrial Training Committee (Week 3-5, sem. 7)	LI Coordinator & FKJ	
FKJ Industrial Training Committee (Week 6-8, sem. 7)	LI Program	

Notations:
FKJ – Faculty of Engineering (*Fakulti Kejuruteraan*)
LI – Industrial training (*Latihan industri*)
SMP - https://smp.ums.edu.my
LI system - http://webapps.ums.edu.my/li

Figure 2.1 Flowchart for Industrial Training procedure.

Section 3: Roles and Responsibility

3.1 Industrial Supervisor

An Industrial Supervisor is an engineer/qualified personnel in the organization, who acts as the local point of contact and mentor for the student in supervision and direction of work activities related to engineering during the industrial training. FKJ has a policy on the supervision whereby **the prospective Industrial Supervisor must be an engineer, or equivalent qualified personnel (degree holder) in the assigned task/process.** The proposed work activities are shown below;

i. Provide Training Plan of the 10-week activities for student (see Appendix D)
ii. Train and assign relevant engineering task to the student.
iii. Supervising student's activities.
iv. Discussing with the Industrial Training Coordinator on matters relevant to the training, projects and student's work performance.
v. Evaluate and assess student's performance during the training period, and to submit the LI-3B and LI-4B forms at the end of training.
vi. Report to Industry Training Coordinator on any misbehaviour of the trainee (missing from work), or major accident involving the trainee.

For the information of Industrial Supervisor, the intention of industrial training is **to expose undergraduates to professional engineering practice and not to acquire craft skills**. Therefore, it is expected that the planned activities should provide insight and familiarity with all common engineering processes and hand-on exposure to a wide range of processes suitable for a young engineer. Observation, demonstration and visits to engineering works may be helpful in many cases, if hand-on is not possible. In such cases, trainee can be instructed to monitor, investigate and propose improvement to the operation of such processes. It is suggested that activities such as team assignment and presentation within a given time can be carried out in order allow assessment by Industrial Supervisor on ability to work in team, communication skill, and time/project management.

3.2 Visiting Lecturer

The Visiting Lecturer is appointed by the FKJ to visit or to contact the student during the industrial training period. The appointment is based on the expertise and the experience of the lecturer related to the industry. The visit may not be carried out for very established companies i.e. Intel, JKR, Telekom etc. or companies that have shown to provide proper training scheme to students from previous visit(s). The duties of the Visiting Lecturer include:

i. To receive and read the slides given by the industrial Training coordinator regarding the visit to the industries. It contains procedure on meeting in site visit, virtual meeting, and voice call.
ii. To visit the student to study the suitability of the working environment (for the physical site visit)
iii. To discuss with the Industrial Supervisor on the student performance and any other matters related to Industrial Training.
iv. To meet with higher management to establish industrial linkages.
v. To fill in the LI-3A forms during the visit/meeting.
vi. To submit all the forms to Industrial Training Administration within 15 days upon completion of meeting.
vii. To evaluate the student's performance based on the Technical report and Daily Work Logbook.

3.3 Student

Student is expected to perform the duties that include:

i. Before starting his/her Industrial Training, student must confirm the organization that he/she will report to.
ii. Student should report for duty to the Industrial Supervisor assigned by the organization and agreed by the Faculty.
iii. Student must understand and adhere to the rules and regulations of the organization he/she is placed in.
iv. Student must always wear appropriate attire during the industrial training according to the dress code of the organization.
v. Student must know how to manage his/her time efficiently and follow the working hours set by the organization.
vi. Student must put on their best behaviour, in line with the university's guidelines at all times while undergoing the Industrial Training.
vii. Student must apply for sick leave and submit a medical certificate (MC) to the Industrial Supervisor if he/she is not able to come to work due to sickness.
viii. Student must uphold the image of the UMS.

Section 4: Evaluation

The student will be assessed by (a) academic supervisor, and (b) industrial supervisor according to the following criteria:

a. Academic Supervisor (50%)

ITEM	MAPPING TO COURSE OUTCOME	DISTRIBUTION %
Logbook (Technical content) i. Report on daily tasks ii. Application of knowledge iii. Description of problem solving (Define, identify, solve, verify)/Troubleshooting (If applicable) iv. Clarity of language and presentation	CO4	20%
Technical Report (Format & Referencing) i. Clear organization of chapters ii. Proper labelling of diagrams, figures, pictures, tables and referencing	CO5	10%
Technical Report (Technical content) i. Methodology & Justification ii. Analysis/Results and discussion/Critical evaluation iii. Technical accuracy iv. Clarity of language and presentation	CO4	20%
TOTAL		**50%**

b. Industrial Supervisor (50%)

ITEM	MAPPING TO COURSE OUTCOME	DISTRIBUTION %
Responsibility and integrity	CO1	10%
Cooperative and work effectively in a team	CO2	10%
Communication between team member	CO3	10%
Demonstrate knowledgeable / technical skill in conversation	CO3	10%
Time management and/or project management	CO6	10%
TOTAL		**50%**

Section 5: Continuous Quality Improvement (CQI)

The Industrial Training Management Team of FKJ is committed to evaluate the implementation of the Industrial Training and propose method to improve it for each complete cycle of Industrial Training, as illustrated in Figure 5.1:

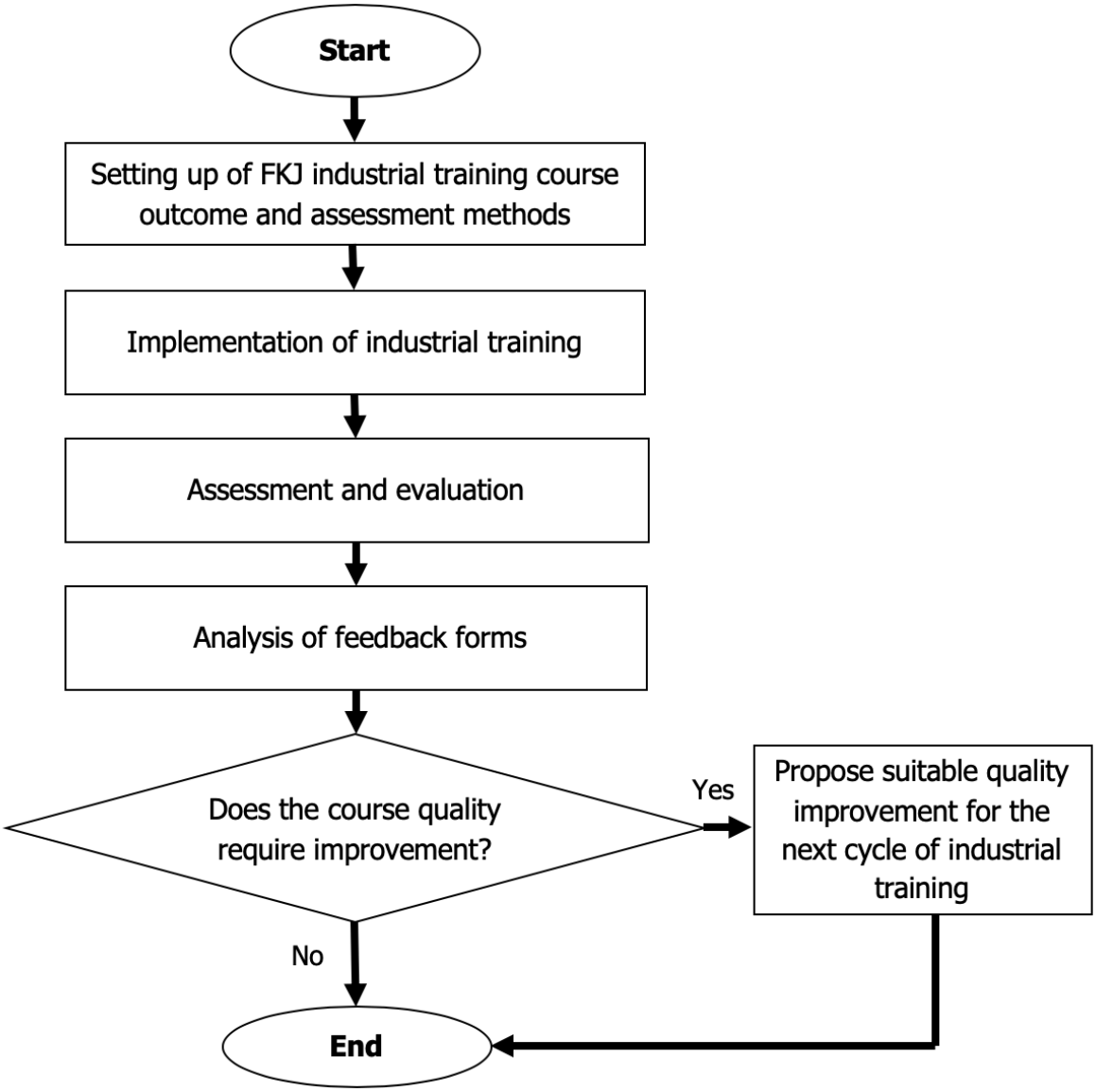


Figure 5.1 Flowchart for continuous quality improvement of Industrial Training.

Section 6: Frequently Asked Questions (FAQs)

1. **What steps should the student take to find companies?**
    - Firstly, student needs to fill in and submit the LI-1 form and 3 company addresses to the Industrial Training Administrator. A curriculum vitae (CV) of the student is required during registration.
    - Secondly, the industrial training committee will provide cover letters such that student can apply for industrial training places.
    - Thirdly, the company will reply to the Faculty.
    - Finally, the industrial training committee will inform the student on the result of placement.
    - Refer to flowchart for the flow of industrial training procedure.

2. **Will industrial training student receive allowance?**
    - Usually, the student does not receive industrial training allowance. However, some companies give allowance to the students.

3. **Are industrial training students insured? If yes, who is the point of contact?**
    - Yes. The point of contact is the Assistant Registrar (Penolong Pendaftar) of UMS' Student Affair Department (HEP). If required, please call +6 088-320000 ext.: 3117 and ask to connect to the Senior Assistant Registrar of HEP.

4. **Can industrial training students apply for a short leave/long leave?**
    - Yes, subject to approval from the Industrial Supervisor and replacement should be arranged.

5. **Can industrial training students take leave from industrial training to attend the PALAPES / SUKSIS program?**
    - Yes. However, the student needs to apply leave from the company and inform the Faculty with the attached letter from the PALAPES / SUKSIS program. The student is advised to replace the two weeks spent on the PALAPES / SUKSIS program. The two weeks can be replaced by working

extra hours for the rest of the 8 weeks of their industrial training period. The student is not allowed to replace the two weeks with semester time.

6. What is the format of the technical report?

- The format for the technical report can be found in the Industrial Training Handbook 2020 (Refer to Appendix C)

7. When is the submission due for industrial training report?

- The technical report should be submitted on the first Monday of the following semester. Failing to submit on time may result in failure of industrial training program.

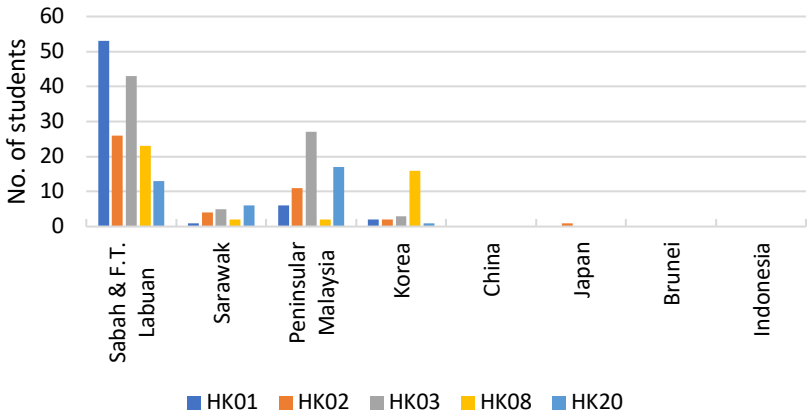
8. What should we do during our industrial training?

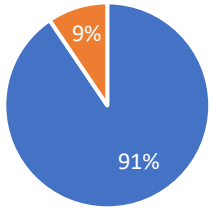
- You should discuss with your industrial supervisor regarding your industrial training activities and schedule. You have to adhere to the company's rules and regulations, and be safe at all times. Remember, you should represent the image of Universiti Malaysia Sabah with your best behaviour.

Appendices

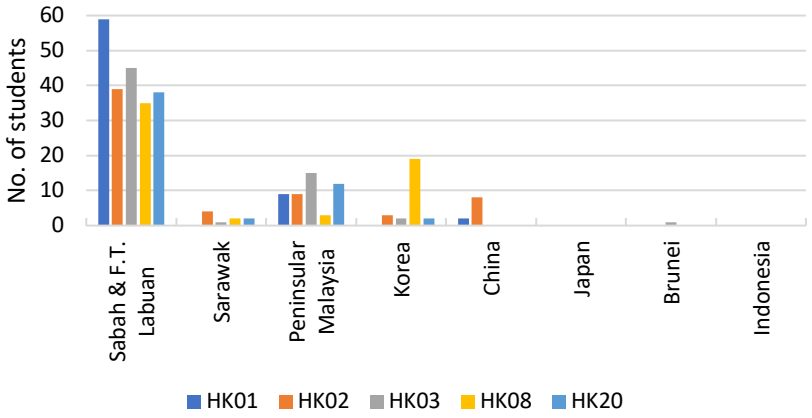
Appendix A – Statistics of Previous Industrial Training (2017 – 2019)

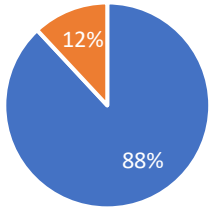
Year 2017



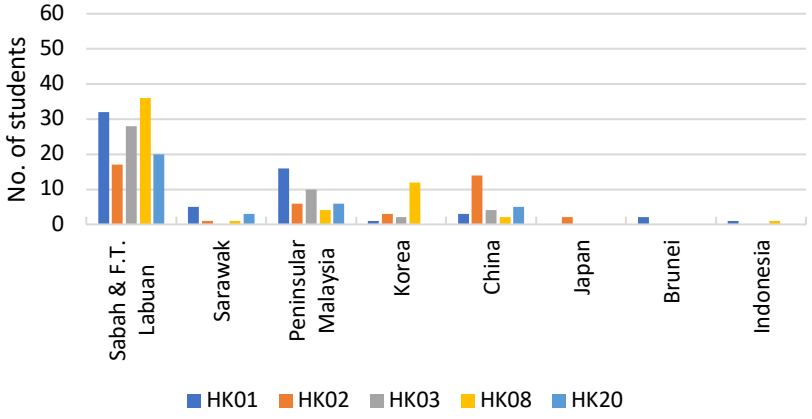


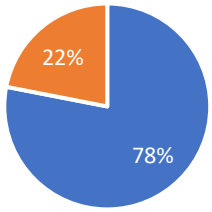
Year 2018





Year 2019





Appendix B – List of Previous Industrial Training Providers (2017 - 2019)

- AAR LANDING GEAR SERVICES SDN BHD
- ACCESS TECHNO SOLUTIONS (M) SDN BHD
- ADVANCED AIR TRAFFIC SYSTEMS (M) SDN BHD
- AGENDA WAJA (SABAH)
- AGENSI NUCLEAR MALAYSIA
- AGRI ASIA REFINERY SDN BHD
- AIMST UNIVERSITY
- AIR KELANTAN SDN BHD
- AJIN INDUSTRIAL CO., LTD
- ALAM KOTAMAS SDN BHD
- ALAMEGA KONSULT
- ALPHAWAVE ENGINEERING (M) SDN BHD
- ANALOG DEVICES SDN BHD
- ANSELL NP SDN BHD (MELAKA)
- ANTARA STEEL MILL
- APEXJUTA SDN BHD
- APPRAISAL PROPERTY MANAGMENT SDN BHD
- ARUP JURURUNDING SDN BHD,
- ASTRAL PROJEK KONSULT
- AZAM JAYA SDN BHD
- BEAUMEDIC
- BHO GROUP
- BINAWIRA ENGINEERING SDN BHD
- BINTULU PORT SDN BHD
- BORNEO HIGHWAY PDP SDN BHD
- BORNEO RICH EMPIRE SDN BHD
- BORNEO SAMUDERA SDN BHD
- BOUSTEAD ESTATE AGENCY SDN BHD
- BOUSTEAD GRADIENT SDN BHD
- BRUNEI SHELL PETROLEUM (BR)
- BUMI WANGSA TMS SDN
- BUMISEM ENGINEERING SDN BHD
- C&F CO., LTD (KR)
- CACAO PARAMOUNT TECK GUAN SDN BHD
- CANDID WELL SDN BHD
- CARBON ENERGY INSPECTION SDN BHD
- CARSEM (M) SDN BHD
- CELESTICA GBS MALAYSIA SDN BHD
- CEMENT INDUSTRIES (SABAH) SDN BHD
- CHANG BO CO., LTD. (KR)
- CHEMSAIN KONSULTANT SDN BHD
- CHINA STATE CONSTRUCTION ENGINEERING (M) SDN BHD
- CHINA-WUYI University (CN)
- CHOSUN UNIVERSITY (KR)
- CJ CONSULTING ENGINEERS SDN BHD
- CMS CEMENT BINTULU SDN BHD
- CNZ SANDAKAN
- COCOALAND INDUSTRY SDN BHD
- CORAK SINAR SDN BHD
- CORPORATE DYNAMICS SDN BHD
- CYES POWER ENGINEERING
- DATARAN BUMIJAYA SDN BHD
- DAYA MURNI ENTERPRISE
- DAYANG ENTERPRISE SDN BHD
- DEEPFURNITURE SDN BHD
- DENG KAI SDN BHD
- DENIM CARE SDN BHD
- DEPARTMENT OF ENVIRONMENT SABAH
- DESA CATTLE (SABAH) SDN BHD
- DESA KIM LOONG PALM OIL SDN BHD
- DEWAN BANDARAYA KOTA KINABALU
- DHI WATER & ENVIRONMENT (M) SDN BHD
- DIPSOL (M) SDN BHD
- DONGHAE HOLE CO., LTD (KR)
- DONGHAI HOLESAW CO.,LTD
- DR. NIK & ASSOCIATES SDN BHD
- DUTA JASA SDN BHD
- DYNAMECH ENGINEERING TECHNOLOGY (M) SDN BHD
- E LIFE SOLUTIONS PLT
- E-QUEST BUILDER GROUP
- ECONMECH ENGINEERING
- ECOOILS SDN BHD
- EMAS RAMAI SDN BHD,
- EMERSON PROCESS MANAGEMENT SDN BHD
- EQUEST BUILDER GROUP
- ES JESSELTON SDN BHD
- ESSENTIAL INFORMATION TECHNOLOGY SDN BHD
- ETERNITY MODE SDN BHD
- EVOLUSI BERSATU SDN BHD
- EVOLUSI WAJA ENTERPRISE
- EXIS TECH SDN BHD
- F&N BEVERAGES MANUFACTURING SDN BHD
- FABER MEDI SERVE SDN BHD
- FELDA PALM INDUSTRIES SDN BHD
- FELDA PRODATA SYSTEMS SDN BHD
- FIRM SYNERGY SDN BHD
- FOKUS NIAGA SDN BHD,
- GEO EXPLORATIONS TESTING & SERVICES (GTS)
- GEOMAPPING TECHNOLOGY SDN BHD
- GIESECKE & DEVRIENT MALAYSIA
- GLOBINACO SDN BHD
- GMP MEDICARE SDN BHD
- GREEN LAGOON TECHNOLOGY SDN BHD
- GREEN PROSPECT SDN BHD
- HOCK SENG LEE DMIA BHD
- HOKENSO SDN BHD
- HOSPITAL LAHAD DATU
- HOTEL PROMONADE TAWAU
- HSS ENGINEERING SDN BHD
- IBS TECHNOLOGY SDN BHD"VOCULUS SDN BHD
- IKHLAS PERUNDING
- IKHLAS PERUNDING
- IMPACTUS BUSINESS SOLUTIONS SDN BHD
- INFERNO NETWORKS CO
- INFINEON TECHNOLOGIES
- INOKOM CORPORATION SDN BHD
- INSIGHT RESOURCES SDN BHD
- INSTITUTE OF MICROENGINEERING AND NANOELECTRONICS (IMEN)
- INTEL MICROELECTRONICS (M) SDN BHD
- IOI ACIDCHEM
- IOI EDIBLE OIL SDN BHD
- IOI PAN CENTURY OLEOCHEMICALS SDN BHD
- IOT RESEARCH LAB
- IP CONSULTANT SDN BHD
- ITS INSPECTION TECHNICAL SOLUTION SDN BHD
- JABATAN AIR NEGERI SABAH
- JABATAN BOMBA DAN PENYELAMAT MALAYSIA NEGERI MELAKA
- JABATAN IMIGRESAN MALAYSIA NEGERI SABAH
- JABATAN KASTAM DIRAJA MALAYSIA
- JABATAN KERETAPI NEGERI SABAH
- JABATAN KERJA RAYA NEGERI KEDAH DARUL AMAN
- JABATAN KERJA RAYA SABAH
- JABATAN KERJA RAYA WILAYAH PERSEKUTUAN LABUAN
- JABATAN KESELAMATAN DAN KESIHATAN NEGERI JOHOR (DOSH)
- JABATAN KESIHATAN NEGERI SABAH
- JABATAN PENGAIRAN DAN SALIRAN SABAH
- JABATAN PENGAIRAN NEGERI SABAH
- JABATAN PENYIARAN KAWASAN SARAWAK
- JABATAN PENYIARAN MALAYSIA SABAH
- JABATAN PERHUTANAN SABAH
- JABATAN PERKHIDMATAN KOMPUTER NEGERI
- JAPAN ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (JP)
- JAYCORP ENGINEERING & CONSTRUCTION SDN BHD
- JJ-LURGI ENGINEERING SDN BHD
- JURUCITA COUNSULTANT
- JURUS PROPERTY
- JURUTERA PERUNDING PESONA REKABINA SDN BHD
- JURUTERA PERUNDING RCS SDN BHD
- JURUTERA PERUNDING SRI ARIF SDN BHD
- JURUTERA PERUNDING ZAABA SDN BHD
- JUTERAS VISION
- KASI (MALAYSIA)
- KEBABANGAN PETROLEUM OPERATING COMPANY SDN BHD
- KEE FATT INDUSTRIES SDN BHD
- KEJURUTERAAN ECONMECH SDN BHD

- KEJURUTERAAN ELEKTRIK NEGERI PAHANG
- KEMENTERIAN PELAJARAN DAN INOVASI
- KEMENTERIAN PEMBANGUNAN LUAR BANDAR
- KENEP RESOURCES (ASIA) SDN BHD
- KENINGAU PALM OIL MILL SDN BHD
- KEYSIGHT TECHNOLOGIES SDN BHD
- KILANG APAS BALUNG
- KIMANIS ADMIN BUILDING
- KIMS (KR)
- KJM ALUMNIUM CAN SDN BHD
- KKIP POWER SDN BHD
- KL KEPONG (SABAH) SDN
- KLC KOREA LAB (KR)
- KOBOLD INSTRUMENTS SDN BHD
- KONSULTAN AZAM SEMPURNA
- KOPERASI PEMBANGUNAN DESA
- KOREA POLYMER CO., LTD. (KR)
- KOTA KINABALU WETLANDS RAMSAR SITE
- KUASA LUMPADANG SDN BHD
- KUMPULAN LIZIZ SDN BHD
- LABUAN SHIPYARD & ENGINEERING SDN BHD
- LADANG SABAH PALM OIL MILL
- LAHAD DATU EDIBLE OIL SDN BHD
- LAKU MANAGEMENT SDN BHD
- LEADSHINE SDN BHD
- LEMBAGA BANDARAN KUDAT
- LEMBAGA PEMBANGUNAN PERUMAHAN DAN BANDAR
- LIM AIK CHAI ELECTRICAL SDN BHD
- LINTASAN RESOURSES S/B
- LIZIZ PLANTATION SDN BHD
- LOJI RAWATAN AIR TELIBONG LL
- LSE LABUAN SHIPYARD & ENGINEERING SDN BHD
- MAJILIS PERBANDARAN TAWAU
- MAJLIS DAERAH KOTA BELUD
- MAJLIS DAERAH KOTA TINGGI
- MAJLIS DAERAH LAHAD DATU
- MAJLIS DAERAH PAPAR
- MAJLIS DAERAH PEKAN PAPAR
- MAJLIS DAERAH SEGAMAT
- MAJLIS DAERAH TENOM
- MAJLIS PERBANDARAN PORT DICKSON
- MAJLIS PERBANDARAN TAWAU
- MAJU ENGINEERING SDN BHD
- MAJU JAYA ENGINEERING
- MAKA ENGINEERING
- MALAYSIA AIRPORT SDN BHD
- MALAYSIA LNG SDN BHD
- MARITIME AND INDUSTRIAL ENGINEERS SDN BHD
- MASWINGS SDN BHD
- MEGAMAS KONSULT SDN BHD
- MEKAR ENTERPRISE
- MELEWAR MILL PALM OIL MILL
- MFS TECHNOLOGY SDN BHD
- MICHEEL CONSTRUCTION HOLDING SDN BHD
- MICROLINK SOLUTIONS BERHAD
- MINISTRY OF DEVELOPMENT NEGARA BRUNEI DARULSSALAM
- MINISTRY OF EDUCATION AND INNOVATION
- MSET SHIPBUILDING CORPORATION SDN BHD
- MUHIBBAH ENGINEERING (M) BHD
- MYOSP
- NATURAL OLEOCHEMICALS SDN BHD
- NEO TECH
- NOLEK SDN BHD
- NONKONG NONGSAN
- NRO JKR SARAWAK
- OGN ONLINE SDN BHD
- P.E.S.B ENGINEERING SDN BHD
- PACIFIC FOOD PRODUCTS SDN BHD
- PANGKALAN POLIS MARIN SANDAKAN
- PATAU-PATAU POWER PLANT
- PC METHANOL SDN BHD
- PEJABAT DAERAH TANJUNG MANIS
- PEM CONSULT SDN BHD
- PEMBINAAN KEKAL MEWAH SDN BHD
- PERBADANAN LABUAN
- PERI FORMWORK MALAYSIA SDN BHD
- PERODUA MANUFACTURING SDN BHD
- PERUNDING BINA DAYA SDN BHD
- PERUNDING DINAMIK
- PERUNDING ERA DAYA SDN BHD
- PERUNDING JASAREKA
- PERUNDING TENAGA TEKNOLOGI
- PESB ENGINEERING SDN BHD
- PETAREKA PERUNDING (S) SDN BHD
- PETRA JADI SDN BHD
- PETROFIQ SDN BHD
- PETRONAS CARIGALI SDN BHD
- PETRONAS CHEMICAL METHANOL LABUAN SDN BHD
- PETRONAS CHEMICALS FERTILISER SABAH SDN BHD
- PETRONAS LNG COMPLEX
- PGEO EDIBLE OILS SDN BHD
- PLANT SAFE FERTILIZER
- PMT INDUSTRIAL SDN BHD
- POWER PROJECT CONSULTANT SDN BHD
- PPG COATINGS (M) SDN BHD
- PRESS METAL BERHAD
- PRODUCTION PLANT
- PROMINENT FLUIDS CONTROL (M) SDN BHD
- PT DIRGANTARA INDONESIA (IDN)
- PT. WIJAYA KARYA (PERSERO) TBK. (IDN)
- PULAU KANDIS CONSTRUCTION SDN BHD
- PUSAT BANDAR WANGSA MAJU
- PUSAT LATIHAN TEKNOLOGI TINGGI (ADTEC) TAIPING
- PYK CONSULTANT, CIVIL & STRUCTURAL ENGINEERS
- RADIO MALAYSIA
- RANHILL POWER II O&M SDN BHD
- RANHILL POWER O&M SDN BHD
- REDWOOD FURNITURE SDN BHD
- RICHTER RUBBER TECHNOLOGY SDN BHD
- ROYAL SELANGOR INTERNATIONAL SDN BHD
- RTM KOTA KINABALU
- RTM SIBU
- SABA-TECH ENGIEERING SDN BHD
- SABAH CREDIT CORPORATION
- SABAH ECONOMIC DEVELOPMENT AND INVESTMENT AUTHORITY
- SABAH ELECTRCITY SDN BHD
- SABAH ELECTRICITY SDN BHD
- SABAH ENERGY CORPORATION SDN BHD
- SABAH FLOUR & FEED MILLS SDN BHD
- SABAH LAND DEVELOPMENT BOARD
- SABAH NET SDN BHD
- SABAH OIL & GAS DEVELOPMENT CORPORATION SDN BHD
- SABAH PORTS SDN BHD
- SABAH STATE WATER DEPARTMENT
- SABAH URBAN DEVELOPMENT CORPORATION SDN BHD
- SABAH WETLANDS CONSERVATION SOCIETY
- SAJ RANHILL SDN BHD
- SAMLING PLYWOOD (MIRI) SDN BHD
- SAMSUNG SDI ENERGY MALAYSIA
- SANDAKAN EDIBLE OILS SDN BHD
- SANDAKAN PORT
- SANLIN CONSTRUCTION CO. LTD,
- SARAWAK ENERGY BERHAD
- SARAWAK ENERGY SDN BHD
- SAWIT KINABALU GROUP
- SEATECH ENGINEERING MAINTENANCE SDN BHD
- SEBRANG PALM OIL MILL
- SEDAFIAT SDN BHD
- SEDCO
- SEPANGAR PLANT
- SESUAI CONSTRUCTION SDN BHD
- SESUNG CO., LTD (KR)
- SHARP S&O ELECTRONICS SDN
- SHELL MDS(BINTULU) SDN BHD
- SIME DARBY RESEARCH SDN BHD
- SINDOK CO. LTD
- SIRIM QAS INTERNATIONAL SDN BHD
- SIRIM SABAH
- SITE PPR ULU PIRASAN
- SMART SPACE KOTA KINABALU
- SMARTOP CO. LTD
- SME KONSULT SDN BHD
- SOUTHKEY MEGAMALL SDN BHD
- SRL ELECTRICAL ENGINEERING SDN BHD
- SRS POWER ENGINEERING SDN BHD
- ST JUDE MEDICAL SDN BHD (ABBOTT)
- STEEL INDUSTRIES (SABAH) SDN BHD
- STMICROELECTRONICS SDN BHD
- STONE EPC (SABAH) SDN BHD,
- STUDIO 715
- SUNGAI BURUNG PALM OIL MILL
- SUPPORT SYMPHONY SDN BHD
- SURE REACH ENTERPRISE

- SYARIKAT PEMBENAAN YEOH TIONG LAY SDN BHD
- SYARIKAT PERNIAGAAN PERABOT NURI SDN BHD
- SYARIKAT UDIN
- SYNTHOMER SDN BHD
- SYSMEX MALAYSIA SDN BHD
- TAMAN HIDUPAN LIAR LOK KAWI (LOK KAWI WILDLIFE PARK)
- TAN CHONG MOTOR ASSEMBLIES
- TECH CO (KR)
- TECHNIPFMC
- TECK GUAN REGENCY
- TELEKOM MALAYSIA BERHAD
- TENAGA NASIONAL BERHAD
- TEXAS INSTRUMENTS,
- THAMBY CONSTRUCTION SDN BHD
- TIMATCH RESOURCES SDN BHD
- TIMORA PALM OIL MILL
- TONIBUNG
- TOP GLOVE SDN BHD
- TOPWISH CONSTRUCTION
- TRIO SERVICES SDN BHD
- TRIPLUS INDUSTRY SDN BHD
- TSH-WILMAR SDN BHD
- TTOP INDUSTRIAL & ENGINEERING SDN BHD
- TURNCOMP BMB SDN BHD
- TWIN SHELL ENGINEERING SDN BHD
- UITM SABAH
- UMS INVESTMENT HOLDINGS SDN BHD
- UNIMEKAR METALS SDN BHD,
- UNIOLEON SDN BHD
- UNIVERSITI MALAYSIA SABAH
- V-WORK SDN BHD
- VELCRO ENVIROTECH SDN BHD
- VILLACO SDN BHD
- WARISAN HARTA SABAH SDN BHD ENERGY VENTURES
- WELDAN MARINE SERVICE SDN BHD
- WESTERN DIGITAL (M)
- WESTERN SABAH TM GSS
- WIJAYA DAYA SDN BHD
- WISMA SABAHPORTS
- WLT PROJECT MANAGEMENT SDN BHD
- WUYI UNIVERSITY
- YANMAR KOTA KINABALU R&D CENTER SDN BHD
- YAP SIM ENGINEERING SDN BHD
- YAYASAN SABAH GROUP
- YK ENGINEERING SDN BHD
- YNY TECHNOLOGY SDN BHD
- ZLS ENGINEERING MANAGEMENT SDN BHD
- ZUMA ENGINEERING SDN BHD

Appendix C – Industrial Training Technical Report Format Guideline

Elements that should be presented:

Executive Summary
Title
Acknowledgement
Table of Contents
Chapter 1 : Introduction (Minimum 4 pages)

- Brief Background of the Organization
  - Organizational History, Structure and Organization Chart, Product/Service, Type of Business, and Human Resources
- Workflow
  - Activities or workflow within the department/unit/section where the student is undergoing Industrial Training
- Objectives of the Student Activities
  - Job scope and objectives of the Industrial Training in that organization in the specified area

Chapter 2 : Job training, experience and accomplishments (Minimum 2 pages)

- Detailed work experience during Industrial Training in essay form.

Chapter 3 : Project Activities (Minimum 20 pages)

- Details of activities/projects (minimum 1 activity, more is accepted) undertaken by the student during the Industrial Training according to the followings headings:
  - Location
  - Procedure/Methods accompanied by:
    - For Engineers – relevant diagrams, drawings and/or hand sketches containing sufficient details to enable draughtsman to work them up into drawings without further guidance.
    - For Information Technologists - relevant software development, network management and troubleshooting, system analysis and design etc.
  - Result/Achievement
  - Conclusion

Chapter 4 : Critical Analysis (Minimum 2 pages)

- Strength/Weakness relating to the job/training/suitability/problem (if any)

Chapter 5 : Suggestion/Resolution & Conclusion (Minimum 2 pages)

- How to solve the problem, any comments about the training and the organization and conclusion

References/Bibliography

Appendix

Attachment

Instructions to the authors:

1. Use Times New Roman font size 11 and 1.5 spacing.
2. Page numbers should be positioned at the top on the right hand-side of the page.
3. Use white A4 size paper.
4. Number of pages should be between 30-50 including tables, figures and photos.
5. All tables and figures must be labelled.

Appendix D - Instructions on Writing Industrial Training Logbook

A logbook is one of the written reports required for Industrial Training assessment. By nature, it should be HANDWRITTEN in the logbook. The logbook should comprise the following items:

1. Student's Detail and Industrial Training Information (Typed on A4 paper and pasted onto the first page of the logbook)
2. Industrial training plan - Outline of training and proposals (Handwritten)
3. Declaration
4. Daily record (Handwritten)
    a. Date
    b. time
    c. Activities:
        i. Topic / Activity / Issue / Problem
        ii. Objective / Goal / Purpose
        iii. Finding / Solution / Conclusion
        iv. Others
    d. Verification from Person in charge
5. Declaration (Typed on A4 paper and pasted onto the last page of the logbook)

Logbook: Industrial Training Plan

Students are required to discuss with industrial supervisor on training schemes during the training period. It may be in a form of training schedule on different departments, skills or mini projects. The training schedule can also be illustrated in the form of Gantt chart if relevant. Students are obligated to comply with the industrial supervisor's instructions.

Logbook: Daily Report

Comprise of detail activities on daily basis. Students need to state the date and time of the activities and tasks that are relevant to industrial training only as detailed above.

Example of Student's Detail and Industrial Training Information

STUDENT'S DETAIL	
Name : Kinabalu Sani	
NRIC No. : 990101-12-1111	Matric No. : BK16110111
H/P No. : 0123333333	House Tel. No. : -
Email : BK16110111@student.ums.edu.my Kinabalu_Sani@mail.com	
Program : Civil Engineering (HK01)	
Permanent address : No. 1, Lorong Ujana 1, Taman Kinabalu 1, Jalan UMS, Kota Kinabalu.	
Emergency Contact Person: Sani Abadi (father)	
Emergency Contact's H/P No. : 0123455555	
PLACEMENT'S DETAIL	
Name of Company : Rasa Syukur Sdn Bhd	
Company address : No. 3, Lorong Ujana 3, Kinabalu Industrial Park, Jalan KIP, Kota Kinabalu.	
Industrial Supervisor's name : Ir. Kassim Kassam	
Industrial Supervisor's Post : Engineer	
H/P No. : 012345678	
Company contact No.: 088-623456	Fax No.: 088-823457
Training Period : 3 Aug – 9 Oct 2020 (10 Weeks)	
Allowance : RM300/month, no transport or accommodation provided *(indicate the amount of allowance paid per month/transport/accommodation)*	

FACULTY CONTACT DETAIL
Faculty Level Industrial Training Committee
Training Coordinator : Ir. Dr. Chua Bih Lii
H/P No. : +6016-2049101
Program Level Industrial Training
Training Coordinator :
Program :
H/P No. :

Example of Industrial Training Plan

INDUSTRIAL TRAINING PLAN

Period	Tasks / Activities
22 June – 29 June 2020	Department: Human Resource Activities: 1. Familiarize with the new working environment. 2. Meeting with industrial supervisor. 3. Briefing about company rules and regulations. 4. Awareness on safety.
30 June – 20 July 2020	Department: Maintenance Activities:

Example of Declaration

DECLARATION

Before submitting this document for assessment, please complete the following declaration:

This is to certify that the contents of the Industrial Training Logbook are a true and accurate reflection of the work done by the student in the training company.

Student's name : KINABALU SANI

Student's signature : -SIGN-

Supervisor's name (Industry) : IR. KASSIM KASSAM

Supervisor's signature: (Industry) -SIGN-

Company's name : Rasa Syukur Sdn Bhd

Company's stamp : -STAMP-

Example of Daily Record

DAILY RECORD

Date:	Topic/Activity/Issue/Problem:
.....	.....
.....	**- TITLE OF YOUR TASK** .....
.....	.....

Objective/Goal/Purpose:

.....

.-PURPOSE OF THE TASK

- INCLUDE SKETCHES/FIGURES FOR BETTER DESCRIPTION

Finding/Solution/Conclusion:

- WHAT HAS BEEN DONE, WHY, HOW, WHO, WHERE

- INCLUDE SKETCHES/FIGURES FOR BETTER DESCRIPTION

-FINAL CONCLUSION OF THE TASK

Others:

.....

Signed by:

.....
(Name:)
Student Trainee

Verified by:

.....
(Name:)
Supervising engineer/personnel

Appendix E – List of Forms for Industrial Training

FORMS NO.	ITEMS	METHOD OF APPLICATION/ SUBMISSION
LI – 1	Student Registration Form	FYP LI System
LI – 2	Industrial Training Commencement Form	Fill in hardcopy, scan into Online https://forms.gle/V1qX2PDtU6br9CYN7
LI – 3A	Industrial Training Visit Form (FKJ Lecturer Report)	Hardcopy / Online https://forms.gle/LjQ2R7PgQa8mLidNA
LI – 3B	Industrial Training Visit Form (Industrial Supervisor Report) Feedback on the Attributes of UMS Trainee Who is Currently Undergoing Industrial Training	Email*
LI – 3D	Industrial Training Visit Form (Student Feedback)	Online https://forms.gle/9GcqW1pvgHteJJL48
LI – 4A	Industrial Training Evaluation Form (Academic Supervisor Report)	Email*
LI – 4B	Industrial Training Evaluation Form (Industrial Supervisor Report)	Email*
LI – 5	Receipt of Industrial Training Report	Email*
LI – 6	Leave application form	Email*

***Note**
Email: lifkj@ums.edu.my
CC Email:
sheena@ums.edu.my (Civil Engineering)
yoongpin@ums.edu.my (Electrical & Electronics Engineering)
sariah@ums.edu.my (Chemical Engineering)
abdullahmt@ums.edu.my (Mechanical Engineering)
farrah@ums.edu.my (Electronics (Computer) Engineering)


UMS
UNIVERSITI MALAYSIA SABAH