

GUIDELINES FOR INDUSTRIAL TRAINING

SCHOOL OF COMPUTING

UNIVERSITI TEKNOLOGI MALAYSIA

CHAPTER 1 – INTRODUCTION

1.1 Preface

Industrial training is a main component in the Bachelor of Computer Science curriculum at Universiti Teknologi Malaysia (UTM). A successful Industrial training is essential for the students to be eligible for the degree. During the Industrial training, the students shall be placed at selected organisations for a certain period, in which they shall be exposed to the reality of the industrial environment. This shall also enable the students to prepare themselves for future career endeavour.

These guidelines are prepared as a reference to facilitate the students in various academic programs such as Bachelor of Computer Science (Bioinformatics), Bachelor of Computer Science (Software Engineering), Bachelor of Computer Science (Computer Networks & Security), Bachelor of Computer Science (Graphics & Multimedia Software), and Bachelor of Computer Science (Database). The guidelines shall help the students in completing their Industrial training successfully.

1.2 Definition

Industrial training refers to the placement of a student for a minimum of **TWENTY** (20) weeks at an external organisation to experience and apply their knowledge theoretically in the professional employment. It is also intended for the student to gain exposure in every aspects of career life - socially, culturally, interactions and work conducts.

1.3 Goal

Industrial training aims to elevate the students' knowledge and skills in a specific profession of their respective fields and at the same time produce graduates who are credible, creative and proficient.

1.4 Objectives

The objectives of the Industrial training are as follows:

- i) Enable the students to adapt to the dynamic working atmosphere;
- ii) Apply the academic knowledge in managing workplace challenges;
- iii) Acquire working experience and develop intellectual knowledge;
- iv) Build effective interaction and communication capabilities at all levels;
- v) Promote teamwork spirit;
- vi) Practise good ethical values and work conducts;
- vii) Establish the University–Industry collaboration;
- viii) Educate the students in producing related technical report.

1.5 Learning Outcomes

Upon successful completion of the Industrial training, the students shall be able to:

- i) Apply the knowledge acquired at the organisation;
- ii) Recognize the industry organisational structure and the roles and responsibilities within the organisation;
- iii) Interact and communicate effectively at all levels;
- iv) Present critical and innovative opinions with confidence, as well as be capable of resolving problems professionally;
- v) Demonstrate excellent ethics and integrity in their work conducts;
- vi) Work as a team player efficiently;
- vii) Deliver a comprehensive technical report.

1.6 Industrial Training Scopes

The scopes of the Industrial training include but not limited to:

- i) System development according to the students' programme specialization; in group or individually. The students should be involved in any of these phases: system analysis, system design, system coding, system validation and verification, system documentation and system maintenance;
- ii) Experience in various line of work through guided tasks such as data collection, experiment sampling, computer hardware installation, maintenance and repair, system design and development, resource management and etc.;

- iii) Exposure in management and administration aspects including acquiring overall understanding about processes and operations of a system;
- iv) Involvement in positive activities within the organisation.

CHAPTER 2 – INDUSTRIAL TRAINING PREPARATION

2.1 Course Registration

It is **COMPULSORY** for the students who intended to go for the Industrial training to enrol for this course on the registration day as set by the University – failing which the students will **NOT** be permissible to commence the Industrial training.

The students **ARE NOT ALLOWED** to enrol for other courses while undergoing the Industrial training.

The students **ARE NOT ALLOWED** to undertake the Industrial training during the final semester of their programme.

2.2 Duration and Course Codes

The Industrial training shall be conducted within the duration as determined by the Faculty for the minimum of twenty (20) weeks for the Bachelor of Computer Science (*majoring*) programme. It shall be taken during the normal semester prior to the final semester of the students' programme. The students are required to register for the following course codes:

- **SCS*4114** (Industrial Training Report) - Graded
- **SCS*4118** (Industrial Training) – (*HW: Hadir Wajib*)

(* - **B** (Bioinformatics) / **J** (Software Engineering) / **R**(Computer Network and Security) / **V**(Graphics and Multimedia Software)

2.3 Registration Requirements

The students are eligible to enrol for Industrial training only if the following requirements are met:

- 1) Achieve the '*acquired credit*', minimum of :
 - 95 credits (for SCSB programme);
 - 92 credits (for SCSD, SCSJ, SCSR and SCSV programmes)

- 2) Attain the CPA in ‘*Good Position*’ (*KB: Kedudukan Baik*) status with CPA \geq 2.0.

However, the student who does not meet these conditions may appeal to the Deputy Dean (Academic) by submitting the completed *Industrial Training Appeal Form* (BLI-1B) [Appendix 1B]. Should the appeal is rejected; the student is required to take on the Industrial training in the subsequent semester.

Student with ‘*Conditional Position*’ (*KS: Kedudukan Bersyarat*) need to appeal to the Deputy Dean (Academic) by submitting the completed *Industrial Training Appeal Form* (BLI-1B) [Appendix 1B].

2.4 Credit Exemption

All direct admission students with related working experience for at least TWO (2) years may apply for credit exemption for the Industrial training. However, Industrial training which was completed during Diploma programme IS NOT QUALIFIED for credit exemption.

2.5 Industrial Training Briefing

The Industrial training briefing shall be held three times:

1. 1st briefing during end of semester 5.
2. 2nd briefing during the beginning of semester 6.
3. 3rd briefing before semester 6 ends.

Students’ attendance to all the briefings are **mandatory**. The briefings are intended to guide the students in selecting and applying for the LI placement and also to guide the students of the procedures and process during training, Industrial training assessments and also rules and misconducts during Industrial training.

The students who are unable to attend the briefings are required to:

- i) Present a show-cause letter to the LI Coordinator before the briefing;
- ii) Submit a complete *Industrial Training Application Form* (BLI-1A) [Appendix 1A] to the Industrial training Secretariat;
- iii) Enrol for the Industrial training via the Industrial Training System (ITS) registration system.

The Industrial training Committee (JKLI) shall decide on the students’ eligibility in order to login to the ITS.

2.6 Communication Channels

The students can contact Industrial training Committee through three channels.

- i) Email Industrial training Committee: jkli@fc.utm.my
- ii) Industrial Training Faculty of Computing UTM Facebook (FB) group.
- iii) Industrial Training System (ITS). Students need to activate the ITS account by:
 - Updating personal details
 - Uploading IC size photo and
 - Uploading résumé.
- iv) Students need to join any communication channel (i.e. FB group/ITS) at the latest one week after briefing.

2.7 Industrial Training Placement Application Procedure

The students should apply placement at external organisation by following rules and guidelines outlined by the Industrial training Committee.

The students are accountable for the consequences of bypassing the Faculty in applying for Industrial training placement. Hence penalties may be imposed, as stipulated in *Appendix 4*. The Faculty shall not be liable for any problem whatsoever and/or legal actions that may be taken by the organization.

Should there be any problem related to the placement, the students are advised to consult the Industrial Training Coordinator or Committee

2.7.1 Placement Requirements

- 1) Call and visit the potential organisations.

Before applying for placement, the students should obtain detailed information about the organisation - including but not limited to:

- i) Organisation/Company background; attach the organisation detailed profile;
- ii) Type of activities:
 - Service(s) provided;
 - Ongoing and/or future projects;
 - Products or goods produced;
- iii) The relevant work scope of the Industrial training.

This information may be acquired directly from the respective organisation or via the students who have formerly completed their training at the organisation.

- 2) Identify the suitable needed transportation and accommodation during Industrial training.
- 3) Take picture of themselves in front of the organisation building
- 4) Fill up Application of *Potential Organisation for Industrial Training* (BLI-1C) and email to JKLI for approval.
- 5) Once the organisation is approved by JKLI, the organisation will be assigned to the student and the status will be changed to PENDING in ITS.
- 6) Collect the Industrial training confirmation letter from the Industrial training Secretariat at the School Academic Office, Level 3, N28a after the ITS status has changed to APPROVED.
- 7) Forward to the organisation the following documents
 - i) The LI confirmation letter;
 - ii) The student's résumé;
 - iii) The Organisation
 - iv) Acceptance for Industrial Training Form (BLI-2A) [*Appendix 2A*]. Other supporting documents.

2.8 Follow-up Procedures

Students need to do follow-up with the organisation should there be no response received within **TWO** weeks of the application.

Steps to be taken following this conditions:

ACCEPTED:

The organisation should return the BLI-2A form to the student or directly to the Faculty Academic Office (by fax, mail or email) with accepted/rejected reply within the period given in the Industrial training calendar.

REJECTED:

In the event the application is rejected, the student is required to submit BLI-2A form or official letter from the organisation as proof; and repeat steps in Section 2.7.1 for new placement application.

NO FEEDBACK FROM ORGANISATION:

In the event the organisation fails to respond within the specified timeframe, the students are expected to revoke the application with a written cancellation letter or and apologies to the organisation. Students need to Cc the withdrawal letter to JKLI and repeat steps in section 2.7.1 for new placement application.

2.9 Procedure to Apply for Industrial Training at Overseas Organisation

Industrial training abroad must obtain the approval from the Ministry of Foreign Affairs Malaysia (Wisma Putra) beforehand. Completed applications should be submitted through the Office of the Deputy Vice-Chancellor (Students Affairs) at least 30 WORKING DAYS before leaving for overseas.

Applications must be accompanied by the following:

- i) Three (3) copies of the application letter and 3 (three) copies of the papers to be done by the Placement Committee.
- ii) The offer letter from the Industrial training organisation
- iii) The overseas application form (Form KN (HEP) (Amendment 2010) completed by the students with comments and support from the faculty's Dean. This form can be obtained from the Office of the Students Affairs.

Applications must clearly state the parties who will fund the training expenses such as airfare, meals, subsistence, accommodation and others.

Students must arrange their own passport / visa.

Students can take additional insurance, and the cost will be borne by the students themselves.

2.10 Industrial Training Placement

The placement shall only be made after **ALL** of the following conditions are complied:

- i) The student have registered for Industrial training course code during pre-registration period.
- ii) Meet the CPA and total '*acquired credit*' requirements as at the preceding semester before the Industrial training commences;
- iii) Meet other requirements as deemed necessary by the Faculty.

The Faculty shall release to the students the confirmation letter for reporting for Industrial training, with the following details:

- i) Name and address of the organisation;

- ii) Name of the officer in charge;
- iii) Telephone and fax number of the organisation;
- iv) Reporting date and time;
- v) Name, telephone and e-mail of the Faculty Supervisor.

The Faculty shall also send the Industrial training Placement official letter to the organisation to notify the information pertaining to the student's name, reporting date and time and the contact number of the Faculty Supervisor.

2.11 Insurance Coverage letter

Before undergoing to Industrial training, students are required to obtain insurance cover letter issued by the office of Student Affairs (HEMA).

CHAPTER 3 – UNDERGOING THE INDUSTRIAL TRAINING

3.1 Reporting at Industrial Training Site

The students are required to report for the Industrial training at the organisation on the set date and time. They need to dress appropriately, portray excellent appearance, demonstrate great interest to start the training and keep good image of the University at all time.

3.1.1 Documents required for reporting

- i) Confirmation letter for reporting for Industrial training;
- ii) Student Metric Card;
- iii) Industrial Training Guideline for Organisation Supervisor (download from ITS).

3.1.2 Immediate Action After Reporting for Industrial Training

Upon reporting, the students are expected to:

- i) Complete the Report Duty Verification form (BLI-1D) as exemplified in Appendix 1D and must be validated by the Organisation Supervisor;
- ii) Consult the Organisation Supervisor pertaining to the scope of responsibilities;
- iii) Communicate to the Faculty Supervisor concerning the work scopes assigned by the organisation, name and contact number of the Organisation Supervisor, location map and the complete address.
- iv) Complete the organisation supervisor information survey form via ITS.

The students shall email the **Report Duty Verification Form (BLI-1D)** to the faculty supervisor in the first week of the Industrial training and **upload** the form via e-learning with the course code SCS*4114.

3.1.3 Industrial Training Venue Change

The Industrial training shall be conducted at the site authorized by the Faculty. Change of the Industrial training site, as per instruction from the organisation, must be reported in writing to the Faculty Supervisor and the Industrial Training Coordinator, at once.

3.1.4 Accommodation and Transportation During Industrial Training

The students are expected to self-arrange their accommodation and transportation during the Industrial training. Any changes of the students' contact number and email address must be immediately informed to the Faculty Supervisor and the Industrial Training Coordinator.

3.2 Industrial Training Duration

The Industrial training shall be conducted within the duration as determined by the Faculty.

The students may start the Industrial training in advance. However, they are not allowed to end the training earlier than the predetermined period.

The students, who are violating the above regulations, may be imposed with disciplinary actions and graded as **FAIL**.

The students who wish to extend their Industrial training period should obtain the approval from the Student Affairs Office, Universiti Teknologi Malaysia and at the same time inform the Faculty Supervisor and the Industrial Training Coordinator on the matter.

3.3 Change of Industrial Training Organisation

Students are **NOT ALLOWED** to change the place of Industrial training unless with a written consent from the Industrial Training Committee, Faculty of Computing, UTM.

The students who illegally move to other organisation shall be considered violating the Industrial training regulations and may be graded as **FAIL**.

For the permitted change of organisation, the students should comply with the following rules:

- i) Change of organisation should only take place not later than the **second week** of the Industrial training;
- ii) Obtain in advance a written approval from the Industrial Training Coordinator and ensure that the Faculty Supervisor is informed;
- iii) Receive the withdrawal letter from the former organisation;
- iv) Receive the Industrial training placement confirmation letter from the new organisation;
- v) Immediately alert in writing to the Industrial Training Coordinator and to the Faculty Supervisor concerning the organisation change, such as address of the new organisation combine with its location map, name and

contact number of the new Organisation Supervisor and the scope of responsibilities.

3.4 Log Book

The students are required to note and update their daily activities using e-log system on every working day. The log should be checked by the Organisation Supervisor bi-weekly. The students are also required to submit the log to the Faculty Supervisor for evaluation at the end of Industrial training.

3.5 Attendance

The students are obligated to show up on every working day during the Industrial training and are expected to conform to the regulations set by the organisation.

3.6 Leave

The students are not entitled to apply for rest leave or annual leave. Nevertheless, leave for official matters must be approved in advanced by the Organisation Supervisor.

In case of emergency, the students should immediately notify the organisation and obtain the leave approval letter from the organisation.

Only medical certificates certified by government General Practitioner shall be accepted by the University. The students should affix a copy of the medical certificates in the log book and send another copy to the Industrial Training Committee and Faculty Supervisor.

The students who go on leave without the organisation's approval shall be considered violating the Industrial training regulations and may be imposed with disciplinary actions.

3.7 Breach of Organisation Regulations

The students who breach the organisation regulations, thus jeopardize the University reputation, can be imposed with disciplinary actions under the University and University College Act, 1971 and Universiti Teknologi Malaysia Practices (Students' Discipline), 1999.

3.8 Withdrawal of Students from the Organisation

In the interest of the University, the Industrial Training Committee, at anytime during the Industrial training period, may withdraw any student from any of the organisation.

3.9 Industrial Training Report

The students are required to complete an Industrial training report. The report should be submitted to the Faculty Supervisor immediately at the end of the Industrial training. Refer to Section 4.2.1 for the Industrial training report writing guidelines.

3.9.1 Plagiarism

Plagiarism is defined as “*act of exploiting the work of a party without due credit - and claim them as your own*”. All ideas and articles extracted from any resources without disclosing its original source is also deemed as plagiarism.

Plagiarism is a serious academic offence for which the students may be imposed with disciplinary actions under the Universiti Teknologi Malaysia Practices (Students’ Discipline).

To prevent plagiarism, the students are strongly advised to rephrase using own words all excerpts from any resources and disclose the original source of the information.

3.9.2 Organisation Confidentiality

The students should not at any time expose any information concerning the organisation to external parties, unless with the consent from the organisation.

The students should not, without permission, print, reproduce or capture image of documents or tools deemed confidential by the organisation.

3.10 Signing of contract or agreement with the company

Student should be careful when asked to sign any contract or conditional agreement with a company that can have an impact on students’ future career. Please contact Faculty’s Deputy Dean of Academic for any questions about the contract or agreement. Organisation shall not make any agreement with the students other than what is written under the scope section in the Industrial training guidebook before or during the Industrial training period without the approval and consent from the student and faculty.

3.11 Visit by Faculty Supervisor and Work Presentation

The Faculty Supervisor will visit the Industrial training site to monitor and assess the student's performance. Generally, the official visit takes place starting week 16th of the Industrial training period.

The Faculty Supervisor must determine the visit date and the students are expected to present their Industrial training outcomes during the visit. It is the responsibility of the students to notify the Organisation Supervisor of the visit.

3.12 Student Performance Evaluation by Organisation Supervisor

In order to enable Organisation Supervisor to evaluate the student, ITS ID will be given. Therefore, students must follow up with the Organisation Supervisor whether ITS ID has been received. Organisation Supervisor is required to assess student using the online Performance Evaluation Form (BLI-2B) via ITS. Student should remind Organisation Supervisor to give assessment not later than the date stipulated in the Industrial Training calendar.

3.13 Completion of Industrial Training

The students should complete the Industrial training by the defined date stipulated in the Industrial training offer letter. The students are expected to report to the Faculty and submit the following documents to their respective Faculty Supervisor within the specified timeframe (refer to the provided Industrial training calendar):

- i) Bound Industrial Training Report;
- ii) Log Book;

Students are also required to fill in the Online Industrial Training Evaluation Form by Student (BLI-1E) via ITS.

CHAPTER 4 – INDUSTRIAL TRAINING EVALUATION

4.1 Evaluation

Industrial training evaluation is intended to measure the students' performances, work quality, and assess their personality development during the Industrial training.

The following components shall be assessed:

- i) Industrial Training Report;
- ii) Log Book;
- iii) Industrial Training Oral Presentation;
- iv) Student Performance Evaluation by Organization Supervisor;
- v) Student Performance Evaluation by Faculty Supervisor.

Student assessment is carried out through two course codes containing the following components and weights:

	Content	Marks (%)
	Industrial Training Report (SCS*4114)	
1.	Technical Report	50
2.	Oral Presentation	20
3.	Log Book	20
4.	Ethics <i>Fulfil with all the faculty rules and regulations, before, during and after the training</i>	10
TOTAL		100
	Industrial Training Performance Evaluation (SCS*4118)	
1.	Faculty Supervisor Evaluation	40
2.	Organisation Supervisor Evaluation	60
TOTAL		100

4.2 Requirement to Pass the Industrial Training

Student must pass the evaluation of both the Industrial Training Report (SCS*4114) and Industrial Training Performance Evaluation (SCS*4118).

The passing mark (minimum) for the Industrial Training Report (SCS*4114) is 60% (grade B-), with condition that the student:

- must submit the technical report within the predetermined date.
- presents the training achievements to the faculty supervisor.
- fill in the online log book daily and must submit the printed log book that has been verified by the organisation supervisor within the predetermined date.

Student who fails Industrial Training Report (SCS*4114), should resubmit a revised technical report within the predetermined date and not required to undertake the industrial training in the following semester.

The passing mark for the Industrial Training Performance Evaluation (SCS*4118) is 60%, with condition that the student:

- receives a total marks of at least 50% from the evaluation of both the organisation supervisor and the faculty supervisor.

Meanwhile, the student who fail the Industrial Training Performance Evaluation (SCS*4118), need to repeat both courses, SCS*4118 and SCS*4114 in the following semester.

4.2.1 Technical Report

The report should incorporate the following contents and shall be assessed as per the weights below :

Content		Weight (%)
1.	Report Title	5
2.	A Page of Abstract	10
3.	Introduction	10
4.	Specific Details on Projects/Training	40
5.	Overall Information of the Industrial Training	10
6.	Conclusion	10
7.	Writing Skills	10
8.	Report Format (refer to the UTM's Thesis Writing Guideline)	5
TOTAL		100

The score for technical report contributes to 50% of the overall marks for the SCS*4114.

Please refer to the *Appendix 4B* for the details guideline of the technical report and Appendix 3A for sample evaluation form for technical report (BLI-3A Industrial Training Evaluation Form By Faculty Supervisor Part A).

The report should also must adhere to the following rules:

- a) The technical report must have a project title.
- b) The contents of the report must follow the format specified by the faculty and must not exceed 50 pages (excluding the terms and appendix)
- c) The report may be written in Bahasa Malaysia or English and should be submitted before/on the date as indicated by the faculty.
- d) The report must be bound using ring binder. The front page should be printed with orange coloured thick paper. The format of front page for the report is as shown in *Appendix 4A*.
- e) The report format must follow the UTM's theses writing guideline:
 - i) A4 size papers;
 - ii) Font style Times New Roman, size 12;
 - iii) 1 ½ spacing;
 - iv) References format.

4.2.2 Oral Presentation

The oral presentation is evaluated by the faculty supervisor during the visit and the evaluation is in accordance to the following weight:

Content		Weight
1.	Presentation manner	3
2.	Preparation and arrangement of presentation	6
3.	Accuracy and clarity of delivery	6
4.	Understanding of project	9
5.	Confidence in delivering	3
6.	Managing the questions and answers	3
TOTAL		30

The score for the oral presentation contributes to 20% of the overall marks for the SCS*4114. The sample evaluation form for oral presentation (BLI-3A Industrial Training Evaluation Form By Faculty Supervisor Part B) is in *Appendix 3A*.

4.2.3 Log Book

The log book is evaluated by the faculty supervisor and the evaluation is in accordance to the following weight:

	Content	Weight
1.	Organisation Supervisor Information	5
2.	Scope of training	5
3.	Log book Presentation	5
4.	Log book Content	30
5.	Log book Verification	5
TOTAL		50

The log book contributes to 20% of the overall marks for the SCS*4114. The sample evaluation form for log book (BLI-3A Industrial Training Evaluation Form By Faculty Supervisor Part C) is in *Appendix 3A*.

4.2.4 Faculty Supervisor Evaluation

The assessment by faculty supervisor is conducted using online form in the ITS-UTM system. The evaluation is in accordance to the following category and weight:

	Content	Weight
1.	Problem Solving and Critical Thinking	
	a. Understanding	5
	b. Work Quality	5
	c. Theory to Practice	5
2.	Communication Skills	
	a. Training Experience	5
	b. Generic Skills Enhancement	5
3	Etiquette and Professionalism	
	a. Commitment	5
5	Lifelong Learning	
	a. Self Reflection	5
	b. Adaptability	5
TOTAL		40

The faculty supervisor evaluation contributes to 40% of the overall marks for the SCS*4118. The sample evaluation form for faculty supervisor evaluation (BLI-3A Industrial Training Evaluation Form By Faculty Supervisor) is in *Appendix 3A*.

4.2.5 Organisation Supervisor Evaluation

The assessment by organisation supervisor is conducted using online form in the ITS-UTM system. The organisation supervisor is expected to assess the student performance based on six categories as follows:

	Content	Weight
1.	Problem Solving And Critical Thinking	
	a. Knowledge on Assigned Work	5
	b. Time Taken to Acquire Work Skills	5
	c. Quality of Work Done	5
	d. Creativity and Innovation	5
2.	Communication Skill	

	a. Socialization and Communication	5
3.	Etiquette and Professionalism	
	a. Ability to Complete Assignments	5
	b. Work Attitude	5
	c. Discipline	5
	d. Attendance	5
4.	Team Work	
	a. Cooperation and Teamwork	5
5.	Leadership Skill	
	a. Leadership and Decision Making	5
6.	Lifelong Learning	
	a. Ability to Work Independently	5
TOTAL		60

The organisation supervisor evaluation contributes to 60% of the overall marks for the SCS*4118. The sample evaluation form for organisation supervisor evaluation (BLI-2B Industrial Training Evaluation Form By Organisation Supervisor) is in *Appendix 2B*.

CHAPTER 5 – ROLE & RESPONSIBILITY AND DISCIPLINE

The Industrial training related activities are convened by the School Industrial Training Committee, who is accountable to the School Academic Committee. The committee members include all departments' representatives – chaired by the Associate Chair (Academic and Student Development) or a coordinator appointed by the School Chair.

School Industrial Training Committee Roles and Responsibilities

The roles of the School Industrial Training Committee include **but not limited to**:

- i) preparing the Industrial training implementation schedule;
- ii) delivering the Industrial training briefing to the students and Faculty Supervisors;
- iii) facilitating the students in meeting the defined requirements to conduct the Industrial training;
- iv) monitoring the suitability of the Industrial training organisation;
- v) coordinating the appointment of the Faculty Supervisors;
- vi) ensuring students go through their Industrial training according to the defined scopes;
- vii) compiling the evaluation forms and reports for grading;
- viii) updating the list of potential Industrial training organisations;
- ix) preparing the Industrial training implementation report for the Faculty Academic Committee, upon completion of the Industrial training of the present semester;
- x) preparing organisations and students feedback report.

5.1 Faculty Industrial Training Supervisor Roles and Responsibilities

The Faculty Industrial Training Supervisors are the personnel of the FC academic staffs - appointed by the Faculty Dean. Their main roles are:

- i) ensuring students are placed at the Industrial training organisation approved by the Industrial Training Committee;
- ii) discussing with the Organisation Supervisors concerning the training programmes;
- iii) facilitating and guiding the students during the Industrial training;
- iv) engaging the organisation and student to discuss their visit to the organisation;

- v) visiting the organisation to monitor and evaluate the students as well as completing the Faculty Supervisor Visit Report Form (BLI-3B) [*Appendix 3*] and return it to the Faculty;
- vi) Monitoring and evaluating the online student's log book and evaluate the final Industrial training report;
- vii) preparing the supervision and evaluation reports and providing recommendations for the Industrial training improvements;
- viii) establishing good rapport with the organisation.

5.2 Deputy Registrar (Academic) Roles and Responsibilities

The Deputy Registrar (Academic) is responsible for:

- i) acting as the secretariat to the Industrial Training Committee;
- ii) issuing official letters pertaining to the Industrial training matters, e.g. student's confirmation, indemnity, the visit notification letter and etc.;
- iii) administering the entry of the Industrial training grades.

5.3 Industry/Organisation Roles and Responsibilities

The roles of the industry/organisation are:

- i) notifying the Faculty of their acceptance within one month from the date of the application or within the specified timeframe as defined by the Faculty;
- ii) appointing suitable officers as the Organisation Supervisors;
- iii) facilitating and guide students undergoing the Industrial training;
- iv) validating the student log book;
- v) evaluating the student performance;
- vi) submitting the student performance evaluation report to the Faculty within the specified timeframe.

5.5 Students Roles and Responsibilities

The student who undertakes Industrial training is responsible mainly to complete the project and tasks assigned by the organisation within the stipulated time frame.

The student is also responsible for:

- i) attending the Industrial training briefing;

- ii) exploring and gathering information about the Industrial training organisation for the approval of the Faculty Industrial Training Committee;
- iii) officially informing the Faculty Industrial Training Committee on the acceptance or decline of the placement offer;
- iv) notifying the Faculty Industrial Training Committee soon after reporting at the organisation;
- v) consulting the Faculty Supervisor when meet with challenges;
- vi) arranging for the accommodation and transportation for the Industrial training;
- vii) completing the tasks assigned by the organisation;
- viii) making notes of daily activities using the online log book, write the Industrial training report and execute any other tasks as instructed;
- ix) giving full cooperation to the organisation at all times;
- x) meeting the training scopes as required by the organisation;
- xi) contributing to the organisation in the right capacity and maintain positive attitude;
- xii) conforming to the organisation rules and regulations;
- xiii) ensuring full attendance at the organisation on every working day;
- xiv) observing self safety throughout the training;
- xv) building good rapport with the organisation as ground to venture into professional career;
- xvi) maintaining the University's good reputation;
- xvii) submitting all related documents to the Faculty Industrial Training Committee in the timeframe as scheduled in the Industrial training calendar;
- xviii) complying with the University and University College Act, 1971 and Universiti Teknologi Malaysia Practices (Students' Discipline), 1999.

5.6 Students Discipline

The students should conform to the instructions and regulations as determined by the Industrial Training Committee – failing which a penalty score may be imposed on the students or may be graded as **FAIL**. The Industrial training misconducts list is stipulated in *Appendix 5*.

CHAPTER 6 - CONCLUSION

Industrial training is significantly beneficial to all concerned parties in contributing towards the development of the nation.

Being a student, one can acquire Industrial experiences and at the same time familiarize themselves with the real working environment at the Industrial training site. This opportunity also enables them to further expand their creativity while seizing the profession ethical values as basis to venture into professional career in the future. Therefore, students must develop themselves to become a valuable asset to the esteemed organisation or industry.

In the meantime, the industry or organisation shall be able to recognize, assess and guide their potential future employees. For some organisations, the students undertaking the Industrial training have in fact overcome the scarcity of professional workforce within the organisation. On top of that, the industry/organisation may also indirectly acquire professional consultation from the Faculty Supervisor during their visits to the organisation.

On the other hand, the Faculty Supervisors, apart from guiding, supervising and assessing the students, may also obtain enormous information on the current developments in the industry/organisation, which will enrich themselves as academic staffs.

By realising the advantages and the limitless amount of benefits that can be accomplished by all parties through this Industrial training, the excellent collaboration between the University and the industry must be greatly considered. The students and the Faculty Supervisors as the unification chain between the University and the organisation must play their considerable parts so that the Industrial training will turn out as the most awaited activity by all parties in order to achieve common aims and aspirations.