



INDUSTRIAL TRAINING PROGRAMME

(Program Latihan Industri)

THE GUIDELINES

(Panduan)

**COLLEGE OF ENGINEERING
UNIVERSITI TENAGA NASIONAL**

(Revised August 2010)



**COLLEGE OF ENGINEERING
UNIVERSITI TENAGA NASIONAL**

The Industrial Training Programme Guidelines

1.0 OBJECTIVES

The objectives of the industrial training are:

- (a) to expose students to the various aspects of industrial practices and ethics.
- (b) To appreciate the significance of theoretical knowledge gained in the University into engineering practice.

2.0 Course Outcomes, Delivery Methods, Assessment and CO-PO Matrix

	Bloom's Domains & Levels	C1&2	C3	C4	C5&6	C2	C2	P	P	A	A	A
		acquire and understand fundamental knowledge of mathematics, science and engineering principles	apply engineering and related principles in solving problems relevant to engineering	analyze engineering related problems	apply critical thinking in designing and evaluating components, processes and systems related to engineering	comprehend the principles of sustainable development	comprehend professional and ethical responsibilities	apply engineering tools and techniques effectively and conduct engineering design/ experiments as well as to analyze data	communicate effectively	function effectively as a team member as well as a leader	appreciate the social, cultural, global and environmental responsibilities of a professional engineer with awareness of contemporary issues	acknowledge the need for, and be able to engage in life-long learning in their engineering fields and works
	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
1	Be able to appreciate the need of being professional and ethical engineers						x					
2	Be able to communicate effectively with the host, peers, and the team members of the company								x			
3	Be able to present the industrial training experience using good oral and written presentation skills								x			
4	Be able to work in groups and perhaps be a leader in these groups when time requires them.									x		
5	Be able to appreciate social, cultural, and environmental responsibilities of a professional engineer										x	
6	Be able to portray correct attitude and commitment to perform the tasks assigned											x

3.0 DURATION

The minimum duration of the training is **twelve (12) weeks**, during the special semester.

4.0 ELIGIBILITY

The student must have completed a **minimum of sixty (60)** credit hours just before the commencement of the training. More explicitly, the student can only undergo the training after completion of Year 2 but before commencing the Final Year Project (FYP) 2.

5.0 PLACEMENT

The student is encouraged to apply for the industrial training placement on his/her own. The place chosen should give some exposure on the field of his/her major. **Checking on the company's profiles and activities are highly recommended.** The company's profiles and activities can be obtained from the company's web page, the library (i.e. REF HF5549.17.F37 1997 25133/2) or you may consult with the industrial training coordinator.

The following documents should be included with the application letter;

1. Curriculum Vitae
2. Verification letter (can be obtained from the COE's Administration Office).

Please refer to the Appendix for an application letter and curriculum vitae (CV) samples. Scholarship holders are required to consult with their sponsor for approved industrial training placement.

6.0 PROCEDURE REQUIREMENTS

- (a) The student must obtain an acceptance letter from the Industrial Training Host as a proof that he/she has secured an Industrial Training Placement.
- (b) The student is required to fill in the ***Industrial Training Registration Form***.
- (c) Then, the student is required to submit the ***Industrial Training Registration Form*** and ***the acceptance letter*** to the industrial training coordinator for approval.
- (d) Upon approval, the student will do online registration at <http://coe3.uniten.edu.my/coe/index.php>. The details of the industrial training placement will be recorded in the system.
- (e) The student is required to submit the approved ***Industrial Training Registration Form*** and ***the acceptance letter*** to COE office. The system will be locked for further amendment by the industrial training officer.
- (f) The student is required to register the industrial training programme as a subject for the Special Semester on the pre-registration day(s) scheduled.
- (g) During the training, the student's conduct must be in accordance with the organization working schemes, rules and regulations. The organization will appoint a host supervisor.

- (h) The student is required to maintain a logbook. All the training activities should be recorded either on daily or weekly basis. The logbook must be certified by the host supervisor.
- (i) At the end of the training, the student is required to fill in the **Industrial Training Completion Form** available at <http://coe3.uniten.edu.my/coe/index.php>.
- (j) Students undergoing industrial training **overseas** must submit the **Host Supervisor Evaluation Form** (hard copy) duly signed by the host supervisor. The form must be submitted along with the log book to the assigned visiting supervisor (examiner).
- (k) The student also needs to obtain the **Industrial Training Completion Certificate** from the Industrial Training Host and submit it to the assigned visiting supervisor. This must be done before the oral presentation.
- (l) The student must write a complete industrial training report and upload it at <http://coe3.uniten.edu.my/coe/index.php>. The maximum limit for the report is 2MB and only pdf files must be uploaded. The student must also submit the certified logbook to the assigned visiting supervisor not later than **two (2) weeks** after the training completed. Please refer to **Industrial Training Programme – Training Report Guidelines** for the format of the report.
- (m) Students are strongly encouraged to maintain a blog from COE3 server. The students can write their experiences in the industry. However, they should not write any confidential/sensitive information about the company. They must obtain written permission from the company before writing any such statements in the blog. Best blog will be awarded appropriately and a certificate of achievement will be issued by the student services unit of COE.

7.0 EVALUATION

Evaluation of the training will be based on:

- a) Assigned Visiting Supervisor's Assessment Report (25%). – Evaluation Form
- b) Student's Oral Presentation Evaluation (20%). – Grading Form
- c) Evaluation of log book (15%).
- d) Industrial Training's Report (40%) – Grading Form

8.0 METHODS OF EVALUATION

8.1 Assigned Visiting Supervisor's assessment report

The assigned visiting supervisor is responsible to assess the student's performance based on the discussion with the Host Supervisor during his/her visit to the host organization using **Evaluation Form** in the Appendix. The grade will be keyed in the **Grading Form** which is available at COE Online. Visits will be arranged between week 6 and week 12 on a convenient date decided by the host and visiting supervisors.

8.2 Assessment of the Student's Presentation.

The student's presentation will be assessed by a panel of evaluators consists of COE's lecturers and it is normally will be held one (1) week after the due date of the industrial training full report submission. The tentative date of the seminar will be published on the notice board. Each student will be given a period of ten (10) to fifteen (15) minutes for the presentation and five (5) minutes for questions and answers (QA). Assessment of the student's seminar will be mainly based on the contents, style of the presentation and also

the ability of answering questions. The presentation may also include a **video presentation** on each student's Industrial Training experience.

Please refer to the **Grading Form** in the Appendix.

8.3 Assessment of logbook and blog

The assigned visiting supervisor is responsible to assess the student's industrial training logbook. The grade will be keyed in the **Grading Form** which is available at <http://coe3.uniten.edu.my/coe/index.php>.

8.4 Assessment of the industrial training report prepared by the student.

The assigned visiting supervisor is responsible to assess the student's performance based on the industrial training report submitted.

9.0 Result

PASS or FAIL grade will be based on marks acquired (accumulated) from all four-evaluation methods above and the minimum-passing percentage is 50%. **FAIL grade will also be given to those who fail to submit the industrial training full report , fail to submit all the necessary forms, and turn up for Student's Seminar.**

“BS” grade will be awarded to students who fail to produce the Industrial Training Completion Certificate from the host supervisor.

APPENDICES

i	Industrial Training Registration Form
ii	Industrial Training Completion Report Form
iii	Evaluation Form
iv	Grading Form
v	Host supervisor report (for students undergoing the training overseas)
vi	Cover letter sample
vii	Curriculum vitae sample
viii	Industrial training report format
ix	Sample of industrial training completion certificate

INDUSTRIAL TRAINING PROCEDURE

Activity	Details	Action by
Before going for the training		
1	Apply and get placement.	Student
2	Submit the Industrial Training Registration Form and the acceptance letter to the industrial training coordinator for approval.	Student
3	Approval of the placement.	Coordinator
4	Register the industrial training details in http://coe3.uniten.edu.my/coe/index.php .	Student
5	Submission of approved Industrial Training Registration Form and the acceptance letter to the COE industrial training officer, Ms Dhiya Syazana. The forms must be submitted only after the online registration. (Ms Dhiya will lock the system from further amendment)	Student
Upon completion of the training		
6	Submit the Industrial Training Completion Certificate to Ms Dhiya.	Student
7	Upload the Training Report at COE Online.	Student
8	Submit the Industrial Training Completion Report Form online at http://coe3.uniten.edu.my/coe/index.php .	Student
9	Submit the certified log book to the assigned visiting supervisor.	Student
10	Marks on the assessment of the training will be recorded at COE online.	Visiting Supervisor /Examiner
11	Submission of grades to the Registrar	Coordinator

INDUSTRIAL TRAINING REGISTRATION FORM

Note: This form needs to be completed by the student and submitted to the Administration Assistant, Industrial Training, College of Engineering. Offer letter must be attached. Online registration must be done at <http://coe3.uniten.edu.my/coe/index.php> before submitting this form.

Name:		Student's ID No.:	
Department:			
Email:			
No. Of Credit Hours Completed:		No. of Credits currently taking:	
Permanent Address:			
Tel:		H/P:	
Postal Address:			
Tel:			
Name and address of company:			
Details of the host supervisor (if available):	Name:		
	Email:		
	Contact No.:		
Student's Signature:		Date:	
Training period:	From:		To:
Training proposal Approved / Not Approved			
Coordinator's signature:		Date:	

INDUSTRIAL TRAINING COMPLETION REPORT FORM

(Note: This form needs to be filled by students after completing the industrial training online at <http://coe3.uniten.edu.my/coe/index.php>)

After having completed the Industrial training, on a scale from (1) to (5), please rate how well this course has helped you to perform the following course outcomes (CO).

(1 = Very dissatisfied, 5 = Very satisfied)

CO1	Be able to acquire knowledge and to demonstrate their technical knowledge in their respective fields from the Industrial training	1	2	3	4	5
CO2	Be able to design a system which may consist of components or processes which should be realistic in terms of its functions in applying the training knowledge for the final year project	1	2	3	4	5
CO3	Be able to understand more when to apply the theoretical aspects and application to solve problems	1	2	3	4	5
CO4	Be able to apply the latest technology available in the market for mini projects	1	2	3	4	5
CO5	Be able to appreciate the need of being professional and ethical engineers	1	2	3	4	5
CO6	Be able to work in groups and perhaps be a leader in these groups when time requires them	1	2	3	4	5

Comments on your achievement of course outcomes (if any):

Please tick your answer.

1) Why do you choose to do the training in this company?

- Because of better allowance Because it is closer to my house Follow friend No other choice

2) On average, how long do you worked in a week?

- < 30 hours 30 –404 hours 40 –50 hours >50 hours

3) How frequent do you meet your supervisor?

- Once a week Twice (or more) a week Once every 2 weeks Once a month
 Just a few times (or less) in the whole training

4) Generally what do you think of the amount of work required/expected in completing your tasks?

- Too much Just nice Too little No opinion

5) Do you think what you have learnt in the training will be useful in your career planning?

- YES NO

6) Do you think you have identified your areas of strengths and weaknesses in order to become a successful engineer after graduation?

- YES NO

If no, what are the areas you need to improve (you may tick more than one): _____

7) Please rate how well Industrial Training has helped you for the following:
 (Rating scale: 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree)

1	IT has taught me proper time management	1	2	3	4	5
2	IT has improve my problem solving skills	1	2	3	4	5
3	IT has improve lifelong learning skills	1	2	3	4	5
4	IT has improve my communication skills	1	2	3	4	5
5	IT has taught me to work independently & creatively	1	2	3	4	5
6	IT has improve my oral presentation skill	1	2	3	4	5
7	IT has improve my report writing skill	1	2	3	4	5
8	IT has improve my confidence level	1	2	3	4	5
9	IT has enhance my knowledge on research & technical skill	1	2	3	4	5
10	IT has better prepared me for real working environment	1	2	3	4	5

<u>EVALUATION FORM</u>					
Note: This form needs to be completed by the examiner online at http://coe3.uniten.edu.my/coe/index.php. r after the industrial training presentation.					
Student Name					
Student ID No.		Department:			
Visiting Date				Time:	
Name and Address of the company					
Number of UNITEN Student(s) undergoing training in the company:					
Company's Main Activities:					
Evaluation of the company					
		Excellent		Satisfactory	
				Not Satisfactory	
Student's Progress (please tick the appropriate box):					
		Excellent		Good	
		Satisfactory		Not Satisfactory	
Immediate action needed to be taken by the Faculty:					
		Not required		Yes (as below)	

<i>Evaluation based on the visiting supervisor's discussion with the Host Supervisor</i>					
Note: This section is to be filled examiner after discussions with the host supervisor.					
Overall training evaluation. Please circle the appropriate range* (1 to 5) *Range: 5 – Excellent, 4 – Good, 3 – Satisfactory, 2 – Below Average, 1 – Weak					
(i) Professionalism:		1 2 3 4 5			
(ii) Communication ability:		1 2 3 4 5			
(iii) Team work:		1 2 3 4 5			

(iv)	Adaptation:	1 2 3 4 5
(v)	Attitude & commitment:	1 2 3 4 5
TOTAL (I + ii ++ v)		
Please list three major activities of training which the student have been exposed to		
(a)		(%)
(b)		(%)
I		(%)
	TOTAL:	(100 %)
Comments or suggestions:		

Grading Form

SI No.	Category	Max. Marks (%)	Marks awarded
1	Evaluation based on the discussion with Host supervisor(Total from previous page)(25)	25	
2	Evaluation of oral presentation (20):		
	Presentation skills	10	
	Exposure to safety, health & environmental issues	5	
	Attitude & commitment to work	5	
	Total marks	20	
3	Evaluation of log book (15)		
	Clarity of work done	5	
	Teamwork	5	
	Depth of work	5	
	Total marks	15	
4	Evaluation of student Report (40):		
	Ability to explain professional and ethical issues encountered	5	
	Formatting and clarity of content	20	
	Awareness of safety, health and environmental issues	5	
	Attitude and commitment	10	
	Total marks	40	
Total marks (sum of item 1 to 4 above)		100	
GRADE*			

* Grade: Marks > 50% is PASS, marks < 50% is FAIL

HOST SUPERVISOR'S REPORT



**COLLEGE OF ENGINEERING
UNIVERSITI TENAGA NASIONAL**

Student's Performance Evaluation Form

(To be Filled by The Host Supervisor of students who are taking up the industrial training in overseas)

Student's Name: _____

Student's ID No.: _____

Training Duration: _____ to _____

Name and Address of The Training Organization

Overall training evaluation. Please circle the appropriate range* (1 to 5)
**Range: 5 – Excellent, 4 – Good, 3 – Satisfactory, 2 – Below Average, 1 - Weak*

(i) Professionalism: 1 2 3 4 5 _____

(ii) Communication ability: 1 2 3 4 5 _____

(iii) Team work: 1 2 3 4 5 _____

(iv) Adaptation: 1 2 3 4 5 _____

(v) Attitude & commitment: 1 2 3 4 5 _____

TOTAL (i + ii ++ v) _____

Please list three major activities of training which the student have been exposed to

- (a) _____ (%)
- (b) _____ (%)
- (c) _____ (%)
- TOTAL: (100 %)

Comments or suggestions:

Host supervisor's signature and stamp:

Date: _____

Please send (post or fax) to:

The Coordinator Of Industrial Training Programme
Civil/Electrical/Mechanical Engineering Department
College of Engineering
Universiti Tenaga Nasional
KM7 Jalan Kajang - Puchong
43009 Kajang
Selangor
(Tel: 03-8921 2020 Fax: 03-89263506)

APPLICATION LETTER SAMPLE

(Your name &
Full address)

(Date)

(Company's name & full address)

Dear Sir,

APPLICATION FOR AN INDUSTRIAL TRAINING PLACEMENT: CIVIL/ ELECTRICAL/MECHANICAL ENGINEERING

I am interested to apply for an industrial training at your company in the above mentioned field. *(if you are interested to be in a specific department then state it specifically)*. The date for the training is from to or minimum of 12 weeks duration.

I am a student of the Universiti Tenaga Nasional pursuing the *Bachelor of Civil/Electrical/Mechanical Engineering (honors)/Information Technology*, and now in my third year of studies. My current CGPA is 3.65 and I have taken some courses such as *(state courses that would be related to your field)*. I hope to gain an industrial experience as a civil/electrical/mechanical engineer and especially in manufacturing/designing/research area *(state the type of exposure that you prefer)*

Attached herewith the verification letter from my institution and my curriculum vitae.

Thank you

Yours sincerely

(Your name)

Enc: letter from institution and CV

() – comments

CURRICULUM VITAE SAMPLE

PERSONAL PARTICULARS

Full Name:
IC No. :
Address:
Telephone No.:
Age:
Date of birth:
Place of birth:
Health:
Height and Weight:
Spoken and Written Languages:

EDUCATIONAL BACKGROUND

1998 – 2001 : Universiti Tanaga Nasional
Bachelor of Mechanical Engineering (Hons.)
Current CGPA : 3.75
Engineering subjects taken:
Computer literacy :

:

....

..

ACHIEVEMENTS

2000 Design Project Competition first place

.....

..

WORKING EXPERIENCE

-if relevant

ACTIVITIES AND HOBBIES

1999 –2000 Exco of Student Representative Council

....

..

CAREER AMBITION

To own an engineering consultant firm within 8 years.

Guidelines for preparation of the training report

1. General format

- Report must be typed on A4 size page with Times New Roman font of size 12. Line spacing is to be kept at 2.0 throughout. A margin of 35 mm should be provided at the left side and 25 mm should be provided at the other sides.
- Cover page format is as below. Font is Times New Roman with size 18 bold should be adopted for the cover page.

<p>INDUSTRIAL TRAINING REPOPRT AT HITACHI (M) SDN. BHD, BANGI</p> <p>BY IQBAL MOHD YUSUF (ME078234)</p> <p>DEPARTMENT OF MECHANICAL ENGINEERING UNIVERSITI TENAGA NASIONAL</p> <p>START DATE : END DATE :</p> <p>IQBAL MOHD YUSUF (ME078234) MECHANICAL ENGINEERING DEPARTMENT</p>

2. Contents of the report

The report should contain the following sections:

a. **Abstract**

This section may contain the details of the company, summary of the training, experience gained, and acknowledgement. It is limited to 3 pages.

a. **Table of contents**

This section must contain the listing of chapters, titles, sub-titles and the page numbers including the details of Appendix if any.

b. Introduction

This section contains the background information of the company which includes the details of activities undertaken by the company, number of persons employed, future business strategies, organizational details, duties , responsibilities , details of your supervisor, etc.

c. Overview of the training

This section should describe the duties and various tasks undertaken by the student during the industrial training. The explanations must follow the schedule as recorded in the logbook. Leave of absence if any should be indicated here along with reasons and explanations on how the absence was made up.

f. Details of experience

The experience gained during the industrial training must be described in this section. Details of projects completed, supervisory roles taken up, estimation, costing, and design works completed and the experience gained thereon should be described in a concise manner. The problems encountered and the approach adopted for solving problems may also be described in this section. The professional and ethical issues, health and environmental issues, that are encountered during the training and how was it tackled should be clearly explained in the report. The attitude and commitment portrayed should also be indicated wherever possible. The report should be concise, according to the format suggested in this guideline. The report will be evaluated by the examiner based on the regulations laid down in the evaluation form. Students are required to go through the evaluation form before writing the report and address all the items that are evaluated in the report. These issues along with the att related to the

g. Discussion and conclusion

This section should have an overall illustration and discussion on the industrial training along with conclusion on the training. This section shall emphasize on the major tasks carried out, major contribution for the company, comments on the tasks performed, recommendations etc.

h. References

The list of references used in preparing the thesis must be listed in this section.

i. Appendix

- Any other relevant details that are appropriate to support the write up of the report should be given in this section. It may include important drawings, design details, copies of letters, project report, Figures, Tables, List of symbols and notations etc.
- Each appendix must have a title and must be mentioned in the main text wherever appropriate. All page numbers for appendixes must be continual from the main text.

COMPANY LETTERHEAD

INDUSTRIAL TRAINING COMPLETION CERTIFICATION

NAME OF STUDENT:

IC NUMBER:

DEGREE PROGRAM:

UNIVERSITY:

NAME AND ADDRESS OF TRAINING ORGANIZATION:

DEPARTMENT FOR INDUSTRIAL TRAINING PLACEMENT:

TRAINING DURATION:

This is to confirm that the above mentioned student has successfully completed his industrial training in our company. During the period of attachment with our company, this student had conducted himself/ herself well and complied with all related rules, regulations and procedures of the company. We trust that the student has benefitted from the practical knowledge gained and exposure to the working environment.

Name and signature of the host supervisor: _____
(Name: _____)

Official stamp:

Date: