Industrial Training (IT) Manual

September 2010

This page was printed empty
Page 338

Table of Contents

This page was printed empty
Page 340

1- About IT Manual

Industrial Training (IT) provides students with necessary professional skills. The student should know and acquire practical skills for professional environment early in his/her university education. The IT manual explains CUFE efforts to impart necessary skills to its credit hour program graduates to ensure their smooth integration in the workforce of tomorrow. The students should find in this document the required information that identifies what is expected from them during their industrial training tasks. There are also guidelines for what the student should do during his/her training in industry as well as the expected contents of the training report and presentation that she/he is required to submit at the end of the training.

2-Introduction

Engineering studies have two pillars contributing side by side to the enhancement of comprehension and study skills. The first is the theoretical pillar; conducted primarily at CUFE in the form of lectures, tutorials and labs, which are accompanied by frequent consultation of various knowledge sources. The second is the practical pillar, in the form of industrial training, during which the student applies theories learnt.

Industrial training offers:

1. Opportunities for real life work and apprenticeship
2. Contact with professional realities that complement, enhance, confirm, and reshape knowledge
3. Chance for career choice through exposure to different work environments and technologies
4. Shortened access to productivity due to practical experience gained during mentored training
5. Increased chances of finding work short time after graduation: employers are ready to hire those who have acquired the practical flair during their Industrial internships.

The ultimate goal of industrial training is to accelerate integration into professional career. This can be achieved through:

1. Integration of all learning in real life environment
2. Exposing students to all industrial engineering tasks: design, production, maintenance, services, equipment operations, technology, and operational techniques
3. Enhancement of student's scientific and practical capabilities. It makes the student perceive the practical significance of the academic topics handled at the faculty, and direct his thinking to the practical aspects.
4. Injecting the feeling of the professional career she/he is heading for, early before graduation. If well planned, industrial training can represent a valuable asset for the graduate, and for the employer. For the latter, post-hiring training can be sensibly shortened.

3-CUFE Industrial Training Courses Requirements

Before graduation, students at CUFE Credit Hour B.Sc. Programs are required to conduct TWO intensive industrial training periods during their summer vacations, see Table-1 below for catalogue descriptions of course contents of IT-1 and IT-2 courses. Students are expected to spend at least 90 training hours (average of 3-4 weeks) in the first Industrial Training course (IT-1) and 180 training hours (average of 6-7 weeks) in the second Industrial Training course (IT-2). IT-1 is scheduled to take place in the summer vacation subsequent to student gaining a minimum status of "Junior," while IT-2 is scheduled to take place in subsequent summer vacations. These training periods should be seized as opportunities to live in a semi professional environment. This should help students integrate knowledge gained at CUFE with the practical requirements of real-life work: they should perform practical tasks they share in planning before training under the supervision of a specialized faculty member and with the cooperation of the host industrial institution.

Training Opportunities will be selected, as much as possible, to match student's major. However, training in any field can help acquire general skills such as managerial skills, dealing with people, time management, … etc**.**

Supervision of Training: For each student, there will a designated academic supervisor from the faculty members, and a field supervisor from the host industrial organization. The supervisors' role is to facilitate training, each in his area, in order to fulfill training intended learning outcomes (ILOs).

Helpful activities for Industrial Training opportunities include other forms such as industrial fairs, industrial visits, and personal opportunities outside of the regular curricula.

Table-1 Catalogue Descriptions for Industrial Training-1 and Industrial Training-2 Courses

Industrial Training-1
Training on industrial establishments relevant to the program. Training Lasts for a total o 90 hours, during a minimum period of three weeks. The program training advisor pays a least one follow up visit to the training venue and formally reports on performance o trainee(s). A Mentor in the industrial establishment provides a formal report on the student's performance during training. The student submits a formal report and delivers a presentation to be evaluated by a panel of three members with one member being an external examiner appointed from industry or other colleges of engineering. The course is graded on a Pass/Fail system.

Industrial Training-2
Training on industrial establishments relevant to the program. Training lasts for a total of 180 hours, during a minimum period of six weeks. The program training advisor pays at least two follow-up visits to the training venue and formally reports on the performance of trainee(s). A Mentor in the industrial establishment provides a formal report on the student's performance during training. The student submits a formal report and presentation to be evaluated by a panel of three members with one member being an external examiner appointed from industry or other colleges of engineering. The course is graded on a Pass/Fail system

4- Intended Learning Outcomes

4.1 ILO's for Industrial Training-1

On successful completion of Industrial Training-1 course, students will be able to:

1- Identify the expected engineering responsibilities and ethics of work.
2- Integrate knowledge acquired from academic courses to a real-life environment.
3- Practice professional report writing and presentation skills.
4- Distinguish knowledge and skills needed to develop solutions in real-work environment.
5- Communicate and work effectively within a team.
6- Connect with future employers**.**

4.2 ILO's for Industrial Training-2

On successful completion of Industrial Training-2 course, students will be able to:

1- Identify the expected engineering responsibilities and ethics of work.
2- Integrate knowledge acquired from academic courses to a real-life environment.
3- Implement and exchange knowledge and skills needed in real-life engineering projects.
4- Practice the neatness and aesthetics in design and implementation.
5- Prepare and present professional technical reports in the area of expertise.
6- Practice how to systematically deal with and solve practical engineering problems.
7- Communicate and work effectively within a team.
8- Work under stress and manage constraints of quality, time and cost.
9- Consolidate connections with future employers.

5-Duties of the Student

Training and On-The-Job training (OJT) are non-traditional ways of learning. In these forms of training, trainee's efforts and inputs are essential while those of the instructor or mentor are administrative in nature. The student is committed to specific tasks before, during and after training. The following tasks are designed to ensure quality training as represented in the diagram shown in Fig.1 below.

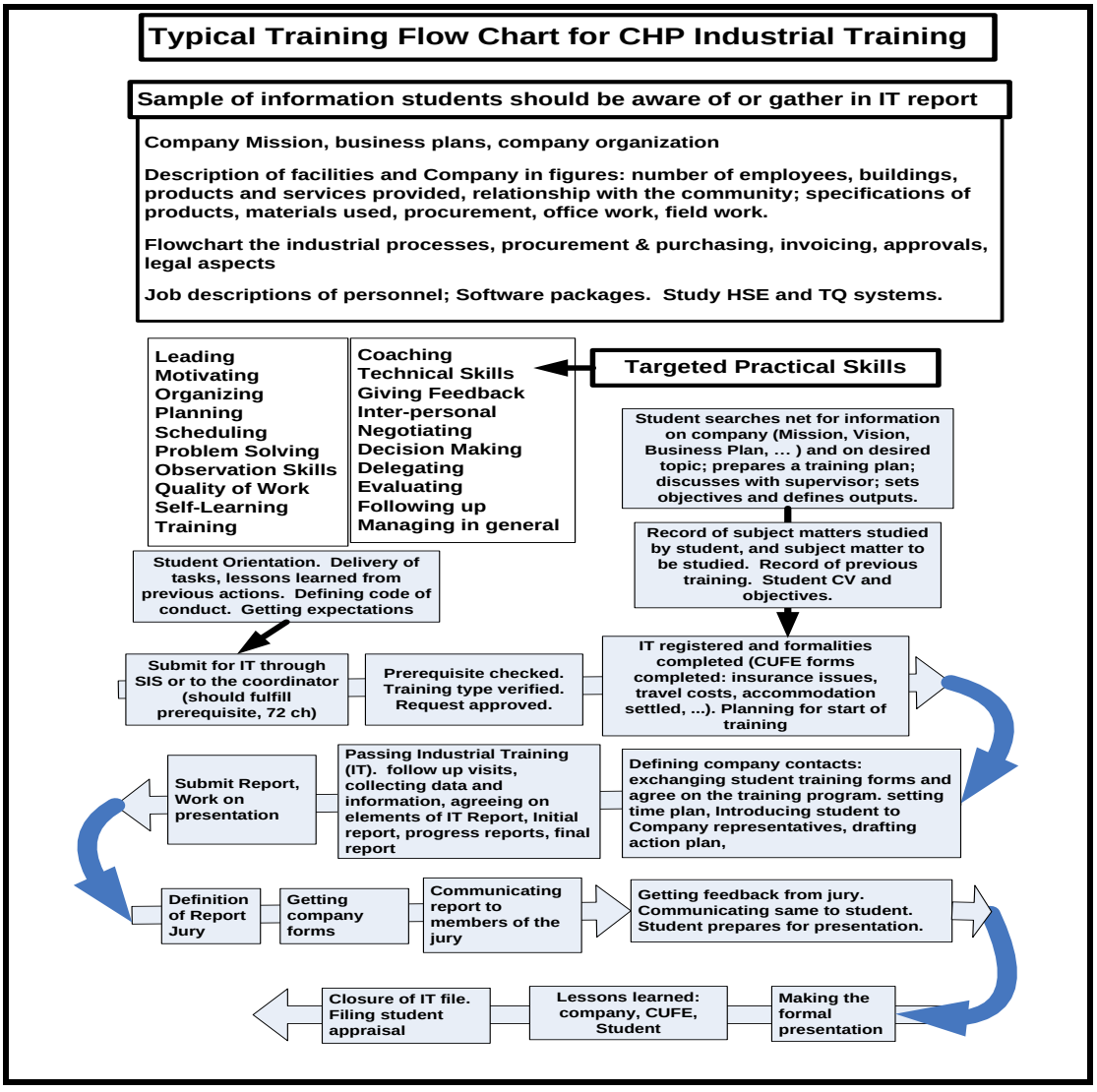

Fig.1. Typical Flow Chart for Credit Hour Program (CHP) Industrial Training Activities

5.1. Before Training

The student trainee should:

1. Review technical material and courses related to scheduled training.
2. Prepare a training plan defining objectives, targeted knowledge, skills, and outcomes.
3. Review a sample of previous reports.
4. Meet with staff and peers who attended training in the same venue.
5. Prepare a detailed action plan – consult with the academic and field advisors. List places to see, equipment to see, operations to observe, conferences and meetings to attend.
6. Collect basic information about the host company, such as:
   - Company mission, business plans, and organization
   - Description of facilities and company: number of employees, buildings, products and services provided relationship with the community, specifications of products, materials used, procurement, office work, and field work.
   - Flowchart of the industrial processes, procurement & purchasing, invoicing, approvals and legal aspects
   - Job descriptions of personnel
   - Health, Safety and Environment (HSE) and Total Quality (TQ) systems.
7. Play a positive role in the coordination between the Faculty and the host organization.
8. Do your own research on training and provide the academic supervisor with your findings, recommendations and preferences.

5.2. During Training

The student trainee should:

1. Follow Health, Safety and Environment rules, emergency plans and drills.
2. Follow work programs.
3. Consult with the field supervisor.
4. Concentrate on the work plan, but gather information on subsidiary activities. Consider the place as a whole system with interrelated components.
5. Ask for information about the essentials. Select the moment and place to ask.
6. Do not be a burden to the field personnel. Understand that they have other important tasks to do.
7. Study and analyze work organization and human resource management.
8. Observe certain operations and ask questions on "some" unclear parts.
9. Share execution of certain tasks. Coordination with the industrial supervisor is essential for awareness of work rules, safety and implementing tasks assigned to the student (trainee).
10. Handle some tasks. Handling tasks implies doing the task till completion according to supervisors' requirements.

11. Observe documents: take quick notes and develop these notes later.
12. Ask the field supervisor to check information you have collected.
13. Remember that Industrial training is a valuable opportunity for networking and building professional ties with people who may be of help to you later in your career.
14. Have most of the elements of the report ready. Make last check of the content. Remember, it is easier to check things on place than after returning to CUFE.

In all cases, full understanding of work steps and requirements is essential for doing tasks and for career in the future. Trainee's activities on site or at the office should be conforming to organizational constraints and health, safety and environment of the work place.

5.3. After Training

The student trainee should:

1. Finalize the "Industrial Training Report (ITR) according to the guidelines. Remember that this is also an application on what you have studied in Technical Writing. Consider the report as your masterpiece that demonstrates your capabilities, skills, and personality.
2. Ask the academic advisor to revise the almost-final copy of the ITR.
3. Show your report in a formal presentation before juries from the faculty and the host company.
4. Notice that CUFE-Credit Hour Program Management shall award the best three reports by displaying these in the annual Industrial Training Forum.
5. Remember to send "letters of thanks" to all of those in the host organization who provided you with help.
6. Draw the lessons of the Industrial training, and improve performance to get better results next time, either for you or for students who will follow you.

6-Planned Outputs of the Industrial Training

1. Industrial Training Reports to present in front of academic and industrial jury
2. Filled-in evaluation forms
3. Timed plan mapping the process of training
4. Presentation
5. Industrial Supervisor's input
6. Other control: observation, remarks on behavior, conduct

7-Learning Resources

Sources of learning in preparing for, or during the industrial training are not the same as the conventional learning sources. They include, but not limited to:

1. Task requirements, task sheets or forms. Many of the tasks have terminologies, compel to the use of specific technologies; take initiative and be prepared for any expectations of assistance.
2. Supplemental sources of information can be drawn from all or any of the following
   - Work manuals
   - Technical magazines, catalogs and web material
   - Service providers, contractors, task lists or flow charts on site
   - Discussions, presentations, demonstrations, job meetings, Q & A.

8-Final Report & Presentations

As mentioned in the output, students shall prepare a technical report at the end of their IT activities. The report shall summarize the activities he/she observed, performed or analyzed during the internship training. The report should be supplemented with samples of original work documents, authorized by the host institution, whenever possible.

A presentation for Industrial training outcome is scheduled and student achievement shall be appraised. The report shall narrate and reflect on performed activities. Student's report shall be presented in front of a jury of CUFE staff, the supervisor, and an external examiner chosen from industry or academia. Grading for IT is “Pass” or ”Fail”. Those who fail IT shall not graduate without successfully satisfying the “Pass” grade requirements. A general description of the contents of IT Report is given in Appendix 2.

Appendix (1)
Industrial Training Profiles for CHS Programs
Training Profile for CEM Students

Introduction

Graduates of the Construction Engineering and Management Program (CEM) at CUFE B.Sc. Credit Hour Programs are civil engineers with a specialty in construction management. Program curriculum requires its students to complete two industrial training courses during summer vacations. The following outlines the expected knowledge and required tasks to be assigned to CEM students during their training:

Industrial Training-1 (IT-1)

Before conducting Industrial Training-1, CEM students should have acquired basic knowledge in the following areas:

- Surveying Techniques, Material Properties, Structural Analysis, Construction Methods, Geotechnics & Geology and Civil Engineering Drawing.

During IT-1, CEM students can be assigned tasks in the following areas:

- Basic Surveying, Quantity Surveying, practice reading construction drawings, supervise and check formwork construction and strengthening, monitor and supervise concrete pouring.

Industrial Training-2 (IT-2)

Before conducting Industrial Training-2, CEM students should have gained knowledge in the following areas:

- Advanced Surveying Techniques, Concrete Properties and Concrete Mix Design, Intermediate Structural Analysis, Stability of Slopes and Advanced Geotechnics, AutoCAD, basic Steel and RC Design and basic Planning Techniques.
- Advanced Structural Analysis, Advanced Steel and RC design, Waste Water Treatment, Water Supply Networks, Transportation Systems and Hydraulic Structures.

During IT-2, CEM students can be assigned tasks in the following areas:

- Advanced Surveying, Quantity Surveying, supervise and check Reinforcement of Slabs, Beams and Columns, monitor Concrete Sampling, relate Reinforcement to Practical Detailing, Construction Planning.
- Design office to check design calculations, calculation sheets, creating AutoCAD drawings and details, construction documents, project specifications, bidding procedures.

Training Profile for STE Students

Introduction

Graduates of the Structural Engineering Program (STE) at CUFE B.Sc. Credit Hour Programs are civil engineers with a specialty in structural engineering. STE Program curriculum requires its students to complete two industrial training courses during summer vacations. The following outlines the expected knowledge and required tasks to be assigned to STE students during their training:

Industrial Training-1 (IT-1)

Before conducting Industrial Training-1, STE students should have acquired basic knowledge in the following areas:

- Fundamentals of civil engineering, such as structural analysis, engineering materials, mechanics of materials, civil engineering drawing, surveying methods, fluid mechanics, strength of concrete, water engineering, mechanical and electrical systems, principles of structural design using reinforced concrete and steel, CAD systems, principles of architectural design, city planning, basics of construction engineering and project management.
- General transferable skills related to technical writing, economics, accounting, engineering graphics, engineering computations, communication and presentation techniques, risk management and environment.

During IT-1, STE students can be assigned tasks in the following areas:

- Stress analysis, preparation of engineering drawings, material testing and concrete mixes, site surveying, water resources, site construction duties, site management, verification of basic design details for reinforced concrete members.

Industrial Training-2 (IT-2)

Before conducting Industrial Training-2, STE students should have gained broad knowledge in the following areas:

- Fundamentals of structural engineering, such as advanced analysis of structures, properties and strength of concrete, reinforced concrete design, design of steel structures, structural dynamics, large span RC structures, soil mechanics, design of foundations, computer-aided analysis and design.
- Fundamentals of civil engineering and construction management, such as highway engineering, engineering geology, water resources and networks, transportation and logistics management, project resources management, construction planning and scheduling, marketing, ethics and legislation.

During IT-2, STE students can be assigned tasks in the following areas:

- Analysis of structures, preparation of design calculations for RC and steel structures, preparation of design drawings and blueprints, material quality control and testing, site geology data, application of commercial computer packages in analysis and design of structures, foundation design, highway and transportation engineering, water resources, supervision of construction phases, site planning and management.

Training Profile for CCE Students

Introduction

Graduates of the Communication and Computer Engineering (CCE) Credit Hour Programs are electrical engineers with a specialty in either computers (CCE-C) engineering or communication engineering (CCE-E). Program curriculum requires its students to complete two industrial training courses during summer vacations. The following outlines the expected knowledge and required tasks to be assigned by each group of students during their training:

Industrial Training-1 (IT-1)

Before conducting Industrial Training-1, all CCE students should have acquired basic knowledge in the following areas: Logic design, microprocessors and algorithm implementation using some computer programming language, database systems and would have acquired skills of working in teams and reporting their activities

During IT-1, CCE-Computer students can be assigned tasks in the following areas: Software installations, simple programming tasks, simple hardware trouble shooting and project team members.

Industrial Training-2 (IT-2 for CCE-C Students)

Before conducting Industrial Training-2, CCE-C students should have gained knowledge in the following areas: Computer Architecture, compilers, and operating systems, software engineering and computer graphics and would have acquired some management, marketing and sales skills.

During IT-2, CCE-C students can be assigned tasks in the following areas: Help in designing and implementing a system to solve a problem or enhance some application. Help to customize some application for a particular customer. Acquire knowledge from customers. Debug systems.

Industrial Training-2 (IT-2 for CCE-E Students)

Before conducting Industrial Training-2, CCE-E students should have gained knowledge in the following areas: Computer architecture, advanced electronic circuit design, communication systems, basic networking, control systems, and would have acquired some management, marketing and sales skills.

During IT-2, CCE-E students can be assigned tasks in the following areas: Design and implementation of electronic circuits, help in installation of mobile communication systems, help in industrial control processes, acquire technical information from customers, and debug systems.

Training Profile for AET Students

Introduction

Graduates of the Architectural Engineering and Technology (AET) at CUFE B.Sc. Credit Hour Programs are general Architectural engineer with a specialty in Building Technology. Program curriculum requires its students to complete two industrial training courses during summer vacations. The following outlines the expected knowledge and required tasks to be assigned to AET students during their training:

Industrial Training-1 (IT-1)

Before conducting Industrial Training-1, AET students should have acquired basic knowledge in the following areas:

- History of Technology and structure in Architecture, CAD engineering drafting, Material Properties, Structural Analysis, building construction techniques, Architectural Design Skills, preparation of Construction documents.

During IT-1, AET students can be assigned tasks in the following areas:

- Perform basic innovative Architectural Design Tasks, Prepare details construction design, Construction technical assistance, and monitor and supervise architectural construction details.

Industrial Training-2 (IT-2)

Before conducting Industrial Training-2, AET students should have gained knowledge in the following areas:

- Advanced computing design, basic Steel and RC Design, basic urban design and city planning and advanced smart and green architectural design.

During IT-2, AET students can be assigned tasks in the following areas:

- Advance design tasks related to smart and green architecture, advanced rending and drafting techniques of design and construction detailing, Technical office tasks and detailing analysis, Full construction documents and site supervision tasks.

Training Profile for PPC Students

Introduction

Graduates of the Petroleum and Petrochemical Engineering Program (PPC) at CUFE B.Sc. Credit Hour Programs are general engineers with a specialty in either Petroleum or Petrochemical engineering. Program curriculum requires its students to complete two industrial training courses during summer vacations. The following outlines the expected knowledge and required tasks to be assigned to PPC students during their training.

Industrial Training-1 (IT-1)

Before conducting Industrial Training-1, all PPC students should have acquired basic knowledge in the following areas: Basics of the petroleum industry, fundamentals of chemical engineering, material properties, general geology and computer applications in petrochemical engineering.

During IT-1, PPC students can be assigned tasks in the following areas:

Basic up- and down-stream topics and operations such as geological and exploration studies, oil and gas exploitation, oil-refining, surface facilities and material and energy calculations, field operations, economical analysis and planning of projects, process safety, risk and environmental Impact assessment.

Industrial Training-2 (IT-2 for PPC-P Students)

Before conducting Industrial Training-2, PPC-P students should have gained knowledge in the areas mentioned under IT-1. **During IT-2**, PPC-P students can be assigned tasks in all up-stream operations mentioned previously in addition to materials requisition, workover, contracts and invoicing of diverse operations. Defining further training topics specific to the workplace can be coordinated with the academic supervisor.

Industrial Training-2 (IT-2 for PPC-C Students)

Before conducting Industrial Training-2, PPC-C students should have gained knowledge in the areas mentioned under IT-1. **During IT-2**, PPC-C students can be assigned tasks in all down-stream topics mentioned under IT-1 PPC above in addition to down stream operations related to gas processing, oil refining, surface facilities, instrumentation, process control, petrochemicals processing and production, unit operations and separation processes. Defining further training topics specific to the workplace can be coordinated with the academic supervisor.

Training Profile for MDE Students

Introduction

The business environment in Egypt is witnessing an evolution in the various branches of industry at large. Modern technologies involving multidisciplinary engineering areas together with varieties of production equipment are brought to use in the various sectors of national industry. Such industries comprise the chemical, processing, manufacturing, engineering, oil and gas, building and construction industries. The program requires its students to register in an industrial training program in the summers of Junior and Senior levels. Younger students can seek training opportunities during the summer even though it is not compulsory for them to enlist. The following outlines the expected knowledge and required tasks to be assigned to MDE students during their training:

Industrial Training-1 (IT-1)

The students have basic knowledge in: Material Properties, Stress Analysis and material testing, Kinematics and Dynamics of Machine Components, Thermo-dynamics, Heat Transfer and Fluid Mechanics. Mechanical Engineering Drawing and Design as well AutoCAD, Manufacturing Processes, Metal Cutting Processes.

During IT-1, MDE students can be assigned tasks in the following areas:

- Practice of Reading Drawings and Assembly
- Material Testing
- Basic Designs of Machine Components
- Balancing of Rotating Machinery
- Engine Dynamics and Power Transmission Systems
- Manufacturing Processes and Machine Tools
- Use of Professional Software (AutoCAD & Solid works).

Industrial Training-2 (IT-2)

Before conducting Industrial Training-2, DEM students should have gained knowledge in the following areas:

- FEM: Finite Element Analysis,
- Group Design Project,
- Mechanism Design
- Industrial Instrumentation, and
- Sheet Metal processing

During IT-2, MDE students can be assigned tasks in the following areas: Stress Analysis Using FEM, All Manufacturing Processes, Group Design project.

Appendix (2)
The Report and Presentation on Industrial Training

I- Final Report Requirements

Language of the report: English
General appearance: Formal and professional. Apply rules of Technical Report Writing

Contents of IT Report

- **Cover page:** Student name, Program title, Dates, Names of supervisors and their affiliations and institutions
- **Acknowledgement:** Acknowledge the host company and faculty supervisors and all those who helped you during the IT.
- **Executive Summary:** Summarize the complete report, and highlight the recommendations
- **Table of Contents: Lists of Tables and Figures** (if necessary)
- **Introduction & Background**
  - Objective of the report (One or two lines)
  - Chronological sequence of events: How the student went through the IT
  - Road map to the sections of the report
- **Body of the report**
  - Information about the place
  - Maps, statistics and other introductory elements
  - Observations
  - Problems and explanations
  - Learned information
  - Training details
  - Achievements
  - Case histories
  - Software applications
  - Technical excerpts
  - How the IT complemented the academic study
- **Conclusions**
- **Recommendations and/or suggestions:** Things to facilitate future training at this institution
- **References:** Books, notes, magazines, personal communications, websites, technical articles, manuals, technical pamphlets, etc…
- **Appendixes:** Include details, samples of documents, examples, etc…

II- Final Presentation Requirements

Length: about 15 minutes
Language: English
Content: a summary of the report, with focus on your achievements and learning outcomes

Parts of the presentation:

- Outline: State the main points in your presentation
- Body: Focus on what you learnt in the IT, your achievements, problems you encountered and your brief explanation of those problems. Include suggestions to help future trainees,
- Time for Questions and Answers: An extra 3-5 minutes is allowed to answer the jury's questions.
- At the end, thank the jury for their time.

Considerations:

- Review your contents carefully and thoroughly before going live in the presentation. You may have a copy of your report with you on the presentation day for reference to specific sections
- Remember that the presentation is not a copy of your report; you need to add your input and draw the jury's attention to the important points in your report.
- A presentation needs adequate use of visuals to appeal to the jury; integrate photos, videos, charts …,etc. where possible. Yet, do not overuse those.
- Maintain balanced eye contact with all the panel members; do not show favoritism to any of them as this may not be good for you later.
- Talk to your panel, not to your slides. Remember, you are giving this presentation to the panel members.

Final Remarks:

1. The report and the presentation reflect the essence of your work. They should not be simple replicas or collections of cut-and-paste incoherent material. Be ready to defend your arguments, not those who have helped you.
2. The contents of the industrial training report and presentation should not be only a mere collection of incoherent Xerox copies of catalogs or articles or materials from the internet. Try to show understanding of the essence and principles of operations.
3. Pay attention to the style, and physical appearance of the report and the presentation and show originalities of your work.
4. For pagination of the report pages, use Roman numbers (upper and lower cases) for parts before the introduction and Arabic numbers for the introduction till the end of the report.
5. The report should be written using Microsoft Word. Submit one hardcopy and one e-copy of the final version to your mentor (s)
6. Consider summer training as an investment you do while you are at the university to capitalize on your chances of getting work because of the practical sense you should gain from exposure to real life environment.
7. Do not limit your exposure to include only the technical "stuff"; be aware of the importance of managerial, human resource, safety and environment and all other issues that form the work environment.

Appendix-3
Industrial Training Forms

A total of 5 forms are used to administer the industrial training activities as follows:

Form IT-01: IT Registration Form in a single Establishment

Form IT-02: IT Registration Form in a Multiple Establishment

Form IT-12: Training Outline form

Form IT-16: Training Monitoring form

Form IT-20: Training Evaluation form

Copies of the above forms are provided below. Students and training advisors are urged to spread the use of these forms for facilitating the administration of industrial training process.

Industrial Training (IT) Registration Form - IT01

IT Level: ☐ IT-1 ☐ IT-2 **Academic Year:** _____

Student Data:

Name: _____ Code: _____

Program: _____ Completed Credits: _____ Cumulative GPA: _____ / 4.0

Home Address: _____

Phone: _____ Mobile: _____ email: _____

Industrial Establishment Data:

Multiple Industrial Establishments, check this box ☐
Write data of main Establishment and Attach Form IT02

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Training Mentor: _____ Phone/Mobile: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

Affidavit:

I hereby certify that the above data in this Form IT01 and its attachment, if any, are correct. I realize that it is my responsibility to fulfill and complete all requirements of Industrial Training as specified by the regulations of Credit-Hours-System Programs of Faculty of Engineering, Cairo University.

If any of the data is false, or If all the requirements are not completed and submitted to the Program Coordinator by the due date, I will get a failure "F" grade in my Industrial Training (IT) course.

Student Name	Student Signature	Date

Approval of IT Supervisor:

* Has the student received an "F" grade in this IT course before? ☐ No ☐ Yes

* Has the student completed electronic registration on CHS website? ☐ No ☐ Yes

If No, why? _____

Name	Signature	Date

Approval of Program Coordinator:

Name	Signature	Date

CHS Students Affairs Unit:

☐ Student Name: _____, Code: _____

☐ Student Program, Completed Credits, and Cumulative GPA are correct.
If not, then Program _____, Completed Credits _____, and CGPA _____

☐ Tuition fees of academic year _____ (☐ Fall , ☐ Spring) are paid.

☐ Registration fees of Industrial Training Course (☐ IT-1 , ☐ IT-2) are paid.

يعتمد	توقيع الموظف المختص	اسم الموظف المختص

CC: CHS General Coordinator / Program Coordinator

تحريرا فى ...../...../.....

Industrial Training (IT) in Multiple Establishments Form - IT02

IT Level: ☐ IT-1 ☐ IT-2 **Academic Year:** _____

Student Data:

Name: _____ Code: _____

Program: _____ Completed Credits: _____ Cumulative GPA: _____ / 4.0

Home Address: _____

Phone: _____ Mobile: _____ email: _____

Number of Industrial Establishments for completing IT requirements: ☐ 2 ☐ 3

Data of Industrial Establishment-1:

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Contact Person: _____ Phone/Mobile: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

Data of Industrial Establishment-2:

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Contact Person: _____ Phone/Mobile: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

Data of Industrial Establishment-3:

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Contact Person: _____ Phone/Mobile: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

_____ _____
Student Signature Date

Approval of IT Supervisor: _____ _____ _____
Name Signature Date

Industrial Training (IT) Outline Form - IT12

IT Level: ☐ IT-1 ☐ IT-2 **Academic Year:** _____

Student Name: _____ Code: _____

Program: _____ Completed Credits: _____ Cumulative GPA: _____

Industrial Establishment Data:

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

Training Outline: Details of training must be provided in the student's final Technical Report

Objective: _____

Week	No of Days	No of Hrs	Training Tasks
1			
2			
3			
4			
5			
6			

Skills Gained From Training: _____

☐ Attached is the Evaluation Report of Student Performance in Training by Industrial Establishment

Additional Comments: _____

Training Mentor: _____ Name _____ Signature _____ Date

Industrial Training (IT) Monitoring Form - IT16

IT Level: ☐ IT-1 ☐ IT-2 **Academic Year:** _____

Student Name: _____ Code: _____

Program: _____ Completed Credits: _____ Cumulative GPA: _____

Industrial Establishment Data:

Name: _____

Address: _____

Phone: _____ Fax: _____ email: _____

Training Mentor: _____ Phone/Mobile: _____

Training Duration: _____ weeks, _____ hours From: _____ To: _____

Visit Summary:

Program Representative: _____ Visit Date: _____

Has the student been visited before during IT training? ☐ No ☐ Yes, date: _____

Is the training objective sufficiently satisfied? ☐ Yes ☐ No, why? _____

Has the student improved or acquired skills during training? ☐ Yes ☐ No, why? _____

Has the industrial establishment facilitated the visit? ☐ Yes ☐ No, why? _____

☐ Attached is the Monitoring Report of Visit by CHS Program Representative

Main Conclusions of Monitoring Report: _____

Degree of Fulfillment of IT ILOs (max = 5)	ILO-1	ILO-2	ILO-3	ILO-4	ILO-5	ILO-6	ILO-7	ILO-8
5								
4								
3								
2								
1								

IT Supervisor: _____ _____ _____
Name Signature Date

Final Industrial Training (IT) Evaluation Form - IT20

IT Level: ☐ **IT-1** ☐ **IT-2** **Academic Year:** _____

Student Name: _____ Code: _____

Program: _____ Completed Credits: _____ Cumulative GPA: _____

Has the student received an "F" grade in this IT course before? ☐ No ☐ Yes

	Industrial Establishment	Duration		From	To
		Weeks	Hours		
1					
2					
3					

Evaluation of Student Final Technical Report: Submission Date: _____

Report Title: _____

Comment on Quality of Report _____

Evaluation of Student Final Oral Presentation: Presentation Date: _____

Comment on Quality of Presentation _____

Comment on Student Replies to Questions and Oral Discussion _____

Final Evaluation:	Examiner-1	Examiner-2	Examiner-3	Average
Report (30 pts)				
Presentation (40 pts)				
Course Work (30 pts)				
Total (100 pts)				

Final Decision
☐ **PASS**
☐ **FAIL**

Additional Comments of Examiners: _____

Examination Committee: Final Examination Date: _____

Examiner-1
Name and Affiliation _____ _____ Signature

Examiner-2
Name and Affiliation _____ _____ Signature

Examiner-3
Name and Affiliation _____ _____ Signature