Kingdom of Saudi Arabia

Ministry of Education

Qassim University



College of Engineering-Unaizah

ENGINEERING TRAINING GUIDE

Guidelines for Students, Faculty and Training Organizations

Prepared by:

Dr. Abdulrahman Ibrahim Alateyah Dr. Ali Sulaiman Alsagri

Dr. Mohamed Saleh Alfawzan

Dr. Mamdouh Abdulakher Ahmed

Dr. Hany Ahmed Dahish

2020









3

Contents

Approval	4
Introduction	5
Part 1: Objectives of Engineering Training	6
Part 2: Regulations for Engineering Training	8
Part 3: Mechanism of Engineering Training	15
Part 4: Professional Ethics Guide	21
Appendix A: Forms	26
Appendix B: Report and Oral Presentation Evaluation Forms	31
Appendix C: Survey Forms	36
Appendix D: Sample Format of Engineering Training Report	40



APPROVAL

The Engineering Training Guide was approved by the Council of College of Engineering-Unaizah in its meeting number <u>3 dated 13/02/1442 H.</u>

Version 1 dated 30/03/1442 H.



Introduction

Engineering Training is recommended by College of Engineering-Unaizah as a graduation requirement to all students in the College. This means that a student cannot graduate without fulfilling this requirement in the due course of his study. The course is a 2-credit hours course.

The main objective of this course is to prepare the students in applying the theory learned in their course work to real-life applications, to gain hands-on experience and necessary engineering skills for a successful professional career.

This Engineering Training Guide includes:

- Objectives of Engineering Training
- Regulations of Engineering Training
- Mechanism of Placement and Evaluation of Engineering Training
- Appendices
 - Appendix A: Contains all necessary Forms to be filled by the student and the External Supervisor.
 - Appendix B: Includes Sample format of the Engineering Training Report, which is to be used as a guide by the student to write his report at the end of his training.

The students are required to thoroughly read this Guide and consult their assigned Coordinators to arrange the start of their training. It is the responsibility of the students to abide by the instructions in this Guide, to attend the introductory seminars regarding engineering training in their respective departments at the announced time and date, to fill out and submit the necessary Forms, and to abide by the regulations of the College and the Training Organization.





PART 1: Objectives of Engineering Training

The main objectives of engineering training include:

- To equip students with hands-on practical work experience.
- To acquaint students with real work of engineers and their profession.
- To train students to apply what they have learned in the class room to solve real engineering problems. This will train them how to apply theoretical knowledge to real-life situations.
- To build up student's professional ability and personality to practically acquire teamwork habits and communication skills (oral and written) through interaction with practicing engineers.
- To prepare the students for involvement in their future career with confidence by providing exposure to real professional environment. Hopefully, this exposure will help in clarifying their career goals and objectives.
- To acquaint students with government and industry by-laws, regulations, standards, codes and specifications, and to provide an understanding of engineering documentation and terminology.
- To expose the students to the importance of independent life-long learning by asking them to search for the needed information related to their training duties.
- To train the students to be responsible, to guide them evaluate/judge different situations or scenarios and to help them make correct decisions.
- To train the students to listen to others and to accept opinions and recommendations from knowledgeable persons.
- To acquaint students with real industrial scale engineering equipment, facilities and production capacities. This exposure will help in transforming the experience of students from lab-scale level to actual scale level.
- To strengthen the relationship between the College of Engineering-Unaizah and the industrial and service sectors. This will help in introducing our students to the national and regional labor market.



- To train the students to develop sense of safety and to apply preventive measures against occupational hazards.



PART 2: Regulations for Engineering Training

Article 2.1: The following words have the specific meanings in these guidelines as follows:

University: Qassim University, Al Qassim.

College: College of Engineering-Unaizah at Qassim University, Al Qassim.

Unit: The Engineering Training Unit in the College.

Engineering Training Coordinator / Coordinator: The representative of an academic Department of the College in the Unit.

Engineering Training Report/ Report: The final comprehensive report submitted by a student to his Coordinator according to the specified format.

Examination Committee: The Faculty members of the Department who will evaluate the student Engineering Training performance.

External Supervisor: The person in the Training Organization under whose guidance the student will undergo Engineering Training.

Guide: The Engineering Training Guide

Regulations: Engineering Training Regulations of the College.

Training Organization: An approved public organization or private company where a student will complete his Engineering Training.

Student Trainee / Trainee: A student of the College Undergoing Engineering Training at a Training Organization.

Article 2.2: These regulations are called Regulations for Engineering Training and are intended for the <u>students</u> and <u>faculty members</u> in the College of Engineering-Unaizah at Qassim University, Al Qassim and the <u>Training Organizations</u>. The regulations are organized in three sections – one each for the concerned entity.



Article 2.3: Regulations for the Students

Article 2.3.1: Engineering Training is treated as a general engineering course with a college code GE and the number 406 i.e. GE 406. This course is mandatory for all students of College of Engineering-Unaizah and carries 2-credit hours.

Article 2.3.2: Student's eligibility for Engineering Training

Students need to fulfill the following requirements to be eligible for registering for Engineering Training:

- (a) Successful completion of a minimum of 100 credit hours after the preparatory year prior to admit for the training program.
- (b)Successful completion / registration of any pre-requisite course(s) as prescribed by each Engineering Department of the College.

Exceptions to the above rules will be examined on a case by case basis by the Unit and a decision is to be made within fifteen (15) days of petition by the student.

Article 2.3.3: Every engineering student has to spend eight to ten (8-10) continuous weeks in a Training Organization according to its regulations. The student has to be registered as a full time student in the College for undertaking Engineering Training. The students are not allowed to register for any other course, in Qassim University or any other Institution, while undergoing Engineering Training.

Article 2.3.4: 100% attendance is required by the student during the Training. Any absences shall be approved by the External Supervisor in writing with proper documentation. However, such absences cannot exceed 3 days. The student has to make up for absences which are more than 3 days by personally making arrangements with the External Supervisor.

Article 2.3.5: Engineering Training is to be completed at one designated Training Organization in one continuous session of eight to ten (8-10) weeks. Exceptions will be examined by the Training Unit on a case by case basis.



Article 2.3.6: If a student does not want to continue his Training at the assigned Training Organization, then he has to officially withdraw from the course according to the University regulations. Failure to do so will result in the award of **Incomplete** grade in the Engineering Training course.

Article 2.3.7: Evaluation of Student Performance

Student performance in Engineering Training will be assessed from the following items:

- (a) Submission of all training forms and reports (Refer to Part 3 of the Engineering Training Guide for list and format of required forms & reports and the associated timelines for each item).
- (b)Confidential evaluation forms from the Training Organization / External Supervisor. It is the student's responsibility to get these reports and forms in a signed and sealed official envelope from the External Supervisor and hand them over to the Coordinator.
- (c) Evaluation of the student's Report and oral evaluation by the Examination Committee in his academic department.

All University regulations related to the use of unfair means are applicable to the Engineering Training course as well.

Article 2.3.8: Incomplete / Fail Grade

All students will be awarded an Incomplete grade for Engineering Training at the end of the Summer semester. Students are required to fulfill the remaining requirements for completion of the course during the summer semester before graduation or after the 10th semester, otherwise a Fail grade will be awarded and the student will have to repeat the Engineering Training.

A student who fails to submit the Engineering Training Report within the allocated time period in the summer semester before graduation or after the 10th semester due to unavoidable circumstances should submit documented proof and a written request to complete the course in the next semester. Such cases will be dealt with on a case by case basis. If such a case is approved, then the student will remain with an incomplete grade in the Engineering Training course. Such a student needs to fulfill the missing



requirements, otherwise a Fail grade will be awarded and he will have to undergo Engineering Training again.

Article 2.3.9: The College will not be responsible for any stipend, travel & lodging, provision of personal vehicle, required supplies and equipment etc. to the student during the Engineering Training.

Article 2.3.10: It is the student's responsibility to inquire about and to adhere to the rules and regulations of the Training Organization. The College will not be responsible for any unethical and unlawful act of the student while undergoing Engineering Training at a particular Organization. However, the College reserves the right of taking necessary disciplinary action against the student who is involved in such an act that brings bad name to the College and the University.

Article 2.3.11: A student has to immediately report any mistreatment / harassment or coercion by the Training Organization for involvement in illegal / immoral act to the Coordinator.

Article 2.3.12: Exemption / Postponement of Engineering Training

Request for exemption / postponement of Engineering Training will be reviewed by the Unit on an individual basis.

Article 2.4: Regulations for the Training Unit, Coordinators and Examination Committees.

Article 2.4.1: The Training Unit consists of one faculty member; called Engineering Training Coordinator, from each Engineering Department of the College.

Article 2.4.2: A new Training Unit will be appointed every year in the first semester of the academic year.

Article 2.4.3: The Training Unit will be functional for three semesters (8th, 9th and 10th of each batch of students).

Article 2.4.4: The duties of the Training Unit includes the following:

- (a) Prepare the annual implementation plan for the Training Unit.
- (b) Maintain an updated list of Training Organizations with the number of trainee positions available in each organization via cooperation with the beneficiaries in public and private sectors.

Engineering Training Guide



- (c) Solicit expressions of interest from the Training Organizations for Engineering Training.
- (d)Evaluating and classifying Training Organizations based on labor market and students' training questionnaires.
- (e) Periodically review performance and suitability of the Training Organizations.
- (f) Discussing and adopting schedules that organize the training before, during and after the training.
- (g)Discussing and approving the program and training package, and distributing the trainees to academic supervisors to ensure the quality of the training.
- (h) Preparing students before the start of the training program through a workshop and introducing students to the regulations governing successful completion of training.
- (i) Periodically review the Regulations and / or the training mechanism and revise them as needed. Any revision/addition to the Regulations and / or the training mechanism will be done with the consensus of all Unit members.
- (j) Preparing the annual report for training.

Article 2.4.5: The duties of the Coordinator include the following:

- (a) Solicit and process applications for Engineering Training from students and arrange for their placement in Training Organizations.
- (b) Explain the Engineering Training program to the students.
- (c) Act as a liaison between the student and the Training Organization.
- (d)Be available to resolve any conflict between the student and the Training Organization.
- (e) Report Student's Pass/Fail/Incomplete grades to the Engineering Training Unit Head.
- Article 2.4.6: The duties of the Examination Committee includes the following:
 - (a) Assess student performance according to the Regulations and report the course grade of each student to the Coordinator.
 - (b)Provide feedback to the Coordinator on the quality of training received by the students at the Training Organization.



Article 2.4.7: Reporting unprofessional conduct of a Training Organization

The Coordinator is to report to the Dean; the conduct of a Training Organization which is found to discriminate / harass a student or coerces him into unlawful acts and/or moral/professional misconduct.

Article 2.5: Regulations for the Training Organizations

Article 2.5.1: Training Organization

The Training Organization shall be approved by the Training Unit and listed in the general list of Training Organizations.

Article 2.5.2: Engineering Training agreement

The Training Organization shall express written interest for involvement in Engineering Training of students belonging to College of Engineering-Unaizah, Qassim University, Al-Qassim.

Article 2.5.3: Responsibilities of the Training Organization

- a- Nomination of a person who shall be in charge of the Training. This person, termed as the External Supervisor, shall be available for consultations by the Coordinator during the Training, if needed.
- b- Provision of conducive professional environment for the student to undertake the Training.
- c- Outlining and explaining the rules and regulations of the Organization under which the student has to work. Such rules include, but are not limited to: (i) work location, (ii) timings of work, (iii) work responsibilities, (iv) confidentiality, (v) use of computer / equipment, (vi) absence policy, (vii) stipend or any other benefits, etc.
- d- Clearly identifying the tasks to be accomplished during the Training.
- e- The External Supervisor shall evaluate the performance of the student in a fair, impartial and professional manner and shall report it in Form A2, which is included in Appendix A of the Engineering Training Guide. It is suggested that the External Supervisor keep a copy of the completed and signed Form A2 for his record and future reference.
- f- It is expected from the External Supervisor to keep the contents of the student evaluation form (Form A2) secret and confidential from the student. The completed and signed form shall be handed over to the student in a signed and sealed official envelope.





- g- The Training Organization shall report any misconduct of the student to the Coordinator before taking any unilateral action.
- h- The Training Organization shall not ask / persuade / coerce the student to indulge in unlawful / unethical / immoral / unprofessional acts.

Article 2.5.4: Undertaking the Engineering Training on self-placement basis

A student is allowed to undertake the Engineering Training on self-placement basis at an organization according to the following categories of organizations:

1) Organization is in the approved list

If the organization is in the approved list or an initial contact between the college and the organization has been made, students are not allowed to collect Training Request Letter till all vacant training positions offered by the by organization in agreement are filled.

2) Organization is not in the approved list

For such organizations, the student must submit to the Coordinator, a Letter of Acceptance, any other company documents as deemed necessary by the Coordinator for approval. Such organizations are expected to meet the following minimum requirements:

- a- officially registered with the Chamber of Commerce. This requirement is applicable to not well-known private sector organizations only.
- b- has official documentations (booklet, catalogs, brochure, stationary, etc.)
- c- has a published known address (Street Address, P.O. Box, e-mail, website)
- d- is engaged in providing engineering services like design, consultancy, construction, manufacturing, R&D, project management and maintenance.

The Coordinator will decide on the suitability of the proposed Organization within 4 weeks from the date of issuance of the Training Request Letter issued by the College of Engineering.

3) Organization offers competitive vacant training positions

In some cases, large industries offer competitive vacant training positions through online applications which is restricted by specific deadlines, in this cases, the Training Request Letter is issued directly for students with high GPAs and still students can apply through either in category one or two.



Part 3: Mechanism of Engineering Training

The mechanism of Engineering Training is divided into four sections namely: (i) General Outline (ii) Placement Procedure (iii) Training Completion Requirements and (iv) Assessment Method.

3.1: General Outline

3.1.1: The Dean of College of Engineering-Unaizah will constitute an **'Engineering Training Unit'** comprising of **'Engineering Training Coordinators'** who will represent each Department in the College. The Unit Head will be appointed by the Dean by rotation among Department Coordinators. These Coordinators will be nominated by the respective Departments at the beginning of the 8^{th} semester and their appointment term will expire at the end of the 10^{th} semester of the academic year.

All timelines related to the activities of a student, the training coordinator and external supervisors are mentioned in the subsequent sections 3.1 to 3.4 and are summarized in Table 1.

3.1.2: The appointed Engineering Training Coordinators in every Department will arrange an **'Introductory Seminar**' in the <u>middle of the 8th semester</u> for all prospective students who will be undertaking Engineering Training in the <u>summer semester</u> between the 9th and the <u>10th semesters or after the10th semesters</u>. (Note: Students seeking engineering training through self placement or overseas placement should start the process immediately after this seminar and follow the procedure described in Section 3.2.2).

3.1.3: The students will be required to register for the course GE 406 during the registration period. Direct online registration will not be permitted. Instead the registration will be done through the Office of the Student Affairs. After evaluation of all summer training applications, the Coordinator in each Department will prepare a final list of eligible candidates. These lists will be forwarded to the Dean's office for approval. All approved names will then be forwarded to the Student Affairs for registration.



3.1.4: In the Introductory Seminar, the students will be briefed about the step-by-step procedure of the Engineering Training from the initial Application till the Final Presentation. They will be shown the links of all Engineering Training related material and forms on the College website. All prospective applicants will be required to complete the Engineering Training Application Form online by the specified deadline. (i.e. the second week of 9th semester)

3.1.5: Each Trainee will be assigned an External Supervisor from the Organization.

3.1.6: Before the start of the training, each Trainee must download the Engineering Training Guide along with the Performance Evaluation and bi-weekly Log Forms (Forms A2 & A3). Trainees must take with them hard copy printouts of these two forms to the place of training. Form A2 is confidential and must be signed and stamped by the External Supervisor on the completion of the training and handed over to the Trainee in a sealed envelope. External Supervisors are suggested to keep a copy of Form A2 for their personal record and future reference. Form A3 is the Trainee's bi-weekly Log Book which must also be signed and stamped by the External Supervisor for the entire period of training on a bi-weekly basis.

3.1.7: At the end of the training, the student has to write a Training Report in the English language as per the format provided in Appendix B of the Engineering Training Guide. The Report must be submitted to the Department's Training Coordinator latest by the start of the second week of the 9th or 10th semester after the end of training period.

3.1.8: The student will have to appear for an oral examination in front of a three- member Examination Committee in <u>the end of the second week of the 9th or 10th semester.</u>

3.2: Placement Procedure

The placement of the Trainee can be done in one of the two ways:

3.2.1: <u>Placement through the University</u>



3.2.1(a): The student must fill out the Application Form (Form A1) online <u>by the deadline</u> provided by the Coordinators (usually the end of the second week of the 9^{th} or 10^{th} <u>semester</u>). The Form can be accessed through College website. On the application form, the applicant must indicate his placement preference i.e. (i) Through University & Self-Placement, or (ii) Self- placement only.

3.2.1(b): A Priority List will be prepared based on student's academic merit (GPA) and the number of credit hours completed. The list will be displayed on the Department notice boards by the Department Coordinators and will be used for placement through the University. Due to the limited number of available positions, placement of every student through the University is not guaranteed and students are highly encouraged to find a position for themselves through Self-placement.

3.2.1(c): As trainee positions become available in different organizations, placement will be done according to the Priority List with the exception of Training positions available in foreign countries. Placement for trainee positions in foreign countries will be made strictly in accordance with student's academic merit (GPA).

3.2.1(d): If a student is offered a trainee position through the <u>University placement</u> procedure and he refuses to accept the position. His name will be taken off the Priority list and he will be required to find a position for himself.

3.2.1(e): If a student is offered a trainee position through the University placement and he accepts the position, he would not be allowed to change the organization if his name has already been forwarded to the Training organization.

3.2.2: <u>Self-Placement</u>

3.2.2(a): Students who intend to seek training opportunities by themselves and do not want their names to be included in the Priority List of the University Placement should check the box for 'Self-Placement Only' on the Application Form A1. If the 'Self-Placement Only' box is checked, the student will be responsible to find a place for himself and his name will not be included in the Placement through the University list.



3.2.2(b): Students seeking placement through the Self-Placement may ask for a 'Training Request Letter' for the Organization they are applying to. As mentioned earlier in 3.2.1(b), students are encouraged to find a position for themselves as the University cannot guarantee a position for every student. Since there is no limit to self-placement applications, students can request multiple 'Training Request Letters' addressed to different Organizations.

3.2.2(c): The Organization to which the student is applying through Self-Placement <u>may</u> or <u>may not</u> be in the Department's approved list of Organizations. If it is not included in the Approved List, the Coordinator may ask for additional information (company brochures, product catalogs, website address etc.) about the Organization from the student in order to determine the suitability of receiving Engineering Training at that particular Organization.

3.2.2(d): If an Organization is willing to accept the applicant as a trainee, the student must bring a Letter of Acceptance from it.

3.2.2(e): All Self-Placement Acceptance letters should be handed over to the Department Coordinator no later than the 12^{th} week of the 9^{th} or 10^{th} semester.

3.2.2(f): Regional & International Placement

Under the Self-Placement scheme, the student can also explore Engineering Training opportunities at the regional & international organizations. All placement applications to these locations will be dealt with on a case by case basis. Obtaining visas, making travel and housing arrangements and timely completion of the Engineering Training for the specified duration of eight to ten (8-10) weeks will be the sole responsibility of the student. The University will, however, provide the necessary documentation to obtain visa and travel permission for such applicants.

3.3: Training Completion Requirements

3.3.1: At the completion of training, the External Supervisor will sign the forms [Forms A2 & A3] and hand them over to the trainee as described in Section 3.1.6 of this Training Guide. It is the responsibility of the student to submit these forms to the Department Training Coordinator within the first two weeks of the start of the 9th or 10th semester.

3.3.2: The student must submit a written Training Report in English as mentioned in Section 3.1.7 of the Engineering Training Guide.



3.3.3: All Training Completion Requirements described in Sections 3.3.1 and 3.3.2 must be submitted to the Department Coordinator no later than the second week of the 9^{th} or 10^{th} semester.

3.3.4: Each Trainee will be required to appear in a short oral examination in front of a three-member Examination Committee constituted by the Coordinator.

3.4: Assessment Method

3.4.1: The Coordinator will receive the Training Reports from the students in <u>the start of</u> the second week of the 9th or 10th semester. Each student is required to submit three copies of the Training Report.

3.4.2: In the <u>second week of the 9th or 10th semester</u>, the Coordinator will constitute a three member Examination Committee and prepare an oral examination schedule for every student who has completed all the requirements of the Engineering Training as outlined in Sections 3.3.1 and 3.3.2 of this Guide.

3.4.3: The Examination Committee will examine the students as per the given schedule and will report the student grades to the Coordinator in the <u>third week of the 9th or 10th</u> <u>semester.</u>

3.4.4: The Coordinator will compile the results and hand them over to the Chair of the Engineering Training Unit. The Unit Chair will get them signed by the Dean of College of Engineering-Unaizah and report them to the Registrar of the University.



3.4.5: Incomplete grades will be dealt with according to Article 2.3.6 of the Regulations.

3.4.6: Student grades will be assessed according to the following break-up:

Total	100%
(c) Oral examination and discussion:(to be assessed by the Examination Committee)	40%
(b) Written Training Report submitted by the student: (to be assessed by the Examination Committee)	40%
(a) Confidential Report of External Supervisor:	20%

3.4.7: <u>Requirements for passing</u>

Undergoing Engineering Training for the specified duration at the assigned Training Organization, submission of the confidential report of the External Supervisor and Engineering Training Report (in English) by the Trainee, oral examination and discussion with the Examination Committee and a minimum overall score of 60% are required to PASS the Engineering Training Course.



Part 4: Professional Ethics Guide

Engineering profession is an important, dignified and learned profession. We expect engineers to exhibits the highest standards of honesty and integrity. The services, the professional engineers provide should reflect quality, honesty, impartiality, fairness, and equity and be dedicated to the protection of the public health, safety, and welfare. Therefore, they must evolve themselves in very honorable and ethical manner so that their conduct must speak itself. Engineering professionals must maintain their high standard of moral and truth, show extreme honesty and trustworthiness, attentive to safeguard humanlife and their welfare and environmental friendly.

4.1: The Fundamental Principles

Engineering professionals must adopt and standup for integrity, honor and dignity of the profession by:

- using their knowledge and skill for the improvement in quality of human wellbeing;
- being upright and unbiased, and serving with faithfulness, the public, their employers and clients;
- striving to increase the competence and prestige of the engineering profession;
- > supporting the professional and technical societies of their disciplines.
- showing respect for others and treat fairly all colleagues and co-workers, regardless of their race and religion, gender and age and disability and nationality of origin;
- serving the community at large;
- accepting responsibility for their actions;
- > performing services only in areas of their competence;
- encouraging colleagues and co-workers to adhere to this code of conduct and support them when they do so;
- seeking to extend public knowledge and appreciation of engineering and its feats; and
- ➤ taking pride in being part of the College of Engineering.



4.2: The Fundamental Canons

Engineers must act according to a standard of professional conduct which requires adherence to the highest ethical principles. Engineers, in carrying out of their professional duties, shall:

- ➤ have priority over the safety, health and welfare of the public.
- perform and offer services and advise on or undertake engineering assignments only in the areas of their competence.
- promote responsibility, commitment, and ethics in both the education and the practice of engineering.
- make public announcements only in an objective and honest way.
- act as trustworthy agents or guardians for each employer or customer, and prevent conflicts of interest.
- duly explain to their employer or client the possible consequences of their professional judgements being disregarded or overruled.
- sign and take responsibility for all the engineering work they prepared or directly supervised.
- creating their professional reputation on the quality of their product and not having unfair competition with others.
- > act to uphold and enhance the honor, integrity, and dignity of the profession.
- continue their professional development through their careers and offer the engineers under their supervision opportunities for professional growth.
- ➤ factor in and follow the socio-environmental impact of their actions and projects.
- commit to life-long learning, keeping their professional skills sharp and first rate; recognize the importance of current events in their work; strive to advance engineering knowledge; and shall encourage other engineers to do the same.
- promptly report to the person concerned any public works, engineering decisions or practices that might endanger the health, safety and welfare of the public.



Engineering Training Guide



- not by word, act, or omission, injure, directly or indirectly, the professional reputation, prospects or business of another Engineer.
- ➢ not seek or solicit a position occupied by another Engineer.
- \blacktriangleright not comment on or criticize the work of other Engineers.
- ➤ be committed to improving the environment to enhance the quality of life.



2

Table 1:	Engine	ering T	raining	Timelines
			8	

		Action by				
Milestone / Time Line	Student	Coordinator	Examination Committee	External Supervisor		
8 th Semester (2 nd week)		Each department nominates a coordinator and officially notified by the Dean				
8 th Semester (7 th /8 th week)	Attend the introductory seminar on Engineering Training	Arrange introductory seminar on Engineering Training				
9 th and 10 th Semesters (End of 2 nd Week)	Fill out Form A1 (Application for Engineering Training) online.	Collection of online applications and determine eligibility				
9 th and 10 th Semesters (End of 4 th Week)		Post names of eligible students with their priority of placement				
9 th and 10 th Semesters (End of 12 th Week)	Submit all Self- Placement Acceptance Letters to Coordinator.	Receive Self-Placement Acceptance Letters from students				
9 th and 10 th Semesters (End of 14 th Week)		 Notify students of their placement in a training organization Notify the External Supervisor of student placement 				
9 th and 10 th Semesters (End of 15 th Week)		Final list of students to be forwarded to Dean's Office for approval and registration.				
Summer (8-10 weeks)	Undergo training at the designated organization	Coordinate between student(s) and the External Supervisor(s) as required		Supervise the student during training		

Engineering Training Guide



N (1)		Action	by	
Time Line	Student Coordinator		Examination	External
Summer (Last week of training)	Get all logbooks, reports etc. completed and signed by the External Supervisor		Committee	SupervisorFill outconfidentialstudentEvaluation form(Form A2) andgive it to thestudent in asealed envelope
10th Semester (End of 1 st Week)		Constitute an Examination Committee comprising of 2 faculty members from the Department		
10th Semester (Start of 2 nd Week)	Training report, bi-weekly log and any other related material to be submitted to the Coordinator	 Receive student reports and External Supervisor evaluation report. Distribute the received material to the Examination Committee Post the oral examination schedule 	Receive student reports from the Coordinator	
10th Semester (End of 2 nd Week)	Oral Presentation		 Evaluate Reports and conduct oral examination. Prepare results of training and hand over the results to the Coordinator 	
10 th Semester (End of 3 rd Week)		Report Pass/Fail/Incomplete grades to the Unit Chair.		



Appendix A – Forms

- Form A1: Application for the Engineering Training (online submission)
- Form A2: Trainee's Confidential Performance Evaluation Report from the Training Organization (hard copy submission; form available on the College website)
- Form A3: Engineering Training Bi-Weekly Log sheet (hard copy submission; form available on the College website)



Form A1 (online)

Qassim University

College of Engineering-Unaizah

Form A1: Application for Engineering Training (To

be completed by the Applicant on COE website)

- 1. Student's Name(Arabic):
- 2. Student's Name(English):
- 3. Student's University ID Number:
- 4. Student's National ID Number:
- 5. Academic Department:
- 6. Mobile:
- 7. Email:
- 8. Current GPA (0.00):
- 9. Completed Credit Hours:

10. Credit Hours registered in the current semester:

11. Seeking training placement through:

- a. University placement & Self placement.
- b. Self-placement only.
- 12. Name and Contact of another person for emergency:

Qassim University College of Engineering-Unaizah

CONFIDENTIAL

Form A2: Trainee's Confidential Performance Evaluation Report from the Training Organization

Note to the External Supervisor: This is a confidential student evaluation form. It is your professional responsibility to keep the contents of this form secret from the student. Please transmit this form to the student in a signed and sealed official envelope to protect is confidentiality.

a) Student Information					
Student's Name	Student Number	Academic Department	Duration of Training		
			From To		
b) Training Organization					
Name of Training Organization	Telephone Fax	Mailing Address	Name & email of Training Supervisor		
c)Attendance					
Total Days of Training	Total days of absence without a valid excuse	Type of Excuse	Daily Working Hours		

d) Suggestions for improvement of the Training Program at Qassim University (Attach extra sheet ifrequired)



28



CONFIDENTIAL

Form A2 (2/2)

e) Trainee's Performance Evaluation by the External Training Supervisor

Please rate the Trainee's Performance on a scale of 1-5 in the following table. Use '1' for 'Poor' and '5' for 'Excellent'.

	Excellent	Very Good	Good	Fair	Poor	Comments
	5	4	3	2	l	
Attendance and Punctuality						
Cooperation and Teamwork						
Taking initiative and accepting responsibility						
Awareness & Observance of Safety Rules and Regulations						
Ability to apply theoretical concepts to						
real life problems.						
Communication Skills						
(Oral & Written)						
Ability to learn new things						
Ability and willingness to carry out						
hands-on type jobs						
Leadership qualities and judgment						
Maintenance of the bi-weekly log book						

Overall Evaluation /Comments: ______ External Training Supervisor's Name.......Signature.......Date......Date.......Seal of Training Organization





Qassim University

College of Engineering-Unaizah

Form A3: Engineering Training Bi-Weekly Log Sheet

Week#_____ Dates: From_____to ____

Dates	Tasks assigned	Tasks accomplished	Observations/Remarks

Name of Student	Academic Department	Signature	Date
	1	e	
Name of External Training Supervisor		Signature	Date

Seal of Training Organization

.





Appendix B – Report and Oral Presentation Evaluation Forms

Form B1: Evaluation Checklist for the ST Final Report

Form B2: Evaluation Checklist for the ST Presentation





Form B1 (1/2)

College of Engineering-Unaizah

Form B1: Evaluation Checklist for the ST Final Report

Student Name	PIN number	
Training Organization		

Scoring system: $0 = Not exist/acceptable, 1 = Weak, 2 = Acceptable, and 3 = Good 4 = Excellent$				
No.	Item to be checked	Score		
I) Re	port Formality			
1	Is the report established in the correct order (Cover page, Acknowledgement, Table of contents, Introduction, Main Body, Conclusion, References, and Appendices)?			
2	Is there a well-formatted cover page and table of contents?			
3	Is the main body of the report divided into sections with appropriate titles and subtitles using appropriate font for each?			
4	Is text written with suitable font size (12 pt. or 14 pt.) Times New Roman?			
5	Do all figures and tables have numbers and a caption , and are properly mentioned in the text?			
6	Does a references section appear as the last Item of the main report? Moreover, In the text, are references used referred to by numbers between two square brackets, e.g. [5].			
II) Re	port Technical Contents			
7	To how extent, the introduction orients the reader to the report (i.e. gives the reader some sense of what follows)			
8	To how extent, the method of writing the report consider the followings: Each paragraph contains only one subject. Punctuations are appropriately used. There are logical relations between sentences in each paragraph. Spell check and language are adequately followed in the report			
9	How extent, the report reflects the practice and experience of the student in the ST.			
10	How extent, the report reflects the ability of students to referee practice and experience to the engineering basics and background.			
11	Does the Appendix section show evidences of student's activities; specific tasks, meeting minutes,etc.			
12	To how extent, the CONCLUSION is clear, insightful, and outlining all important results explained in the report?			
	Total Mark			



Qassim University

Form B1 (2/2)

College of Engineering-Unaizah

Form B1: Evaluation Checklist for the ST Final Report

III) Submission Time

On time

Late for days (in this case <u>2 marks are deducted</u> from the total mark for <u>the first day</u> of lateness and <u>Afterwards</u> extra deduction with a rate of <u>1 mark/day</u> is applied)

Final Mark for the ST Report					
Evaluator Name					
Evaluator Signature		Final Mark	(/ 48)	





Form B2 (1/2)

College of Engineering-Unaizah

Form B2: Evaluation Checklist for the ST Presentation

Student Name	PIN number	
Training Organization		

No.	Evaluation Item	Score		
Scoring system: $0 = Not exist/acceptable, 1 = Weak, 2 = Acceptable, and 3 = Good 4 = Excellent$				
	(I) Presentation Material			
1	Is the presentation established in the sandwich format (Title slide, Introduction, Main Body, Conclusion)?			
2	To how extent the presentation reflects what was learned and practiced?			
3	How do you rate the presentation style and readability?			
4	How do you rate the written English of the presentation?			
	(II) Presenter's Approach			
5	Verbal communication (ability to effectively describe internship experience and project)			
6	Non and Para verbal communication (eye contact, time management, confidence, vocal quality, appropriate gestures, posture, etc.)			
7	How do you rate the student's ability in handling questions and discussions in English?			
(III) Presenter's Background				
8	How do you rate the student's ability to relate the training program to the engineering course(s)			
9	How do you rate the student's background in the relevant course(s) for his training program?			
(IV) Presenter's Technical Experience				
10	Realization of the training company (Management approach, scope, product, overall production facilities,)			
11	Ability to analyses the process and technical aspects for the training activities			
12	Demonstration of daily tasks as per schedule and evidence of participation			
13	Any challenges and case studies discussed with solutions and lessons learnt			
14	Using appropriate terminology and demonstrate ability for professional practicing			
15	Overall quality with accurate interpretation of information			



Qassim University

Form B2 (2/2)

College of Engineering-Unaizah

Form B2: Evaluation Checklist for the ST Presentation

Final Mark for the ST Presentation				
Evaluator Name				
Evaluator Signature		Final Mark	(/ 40)

Date: / /



Appendix C - Survey Forms

Form C1: Summer Training Student Survey

Form C2: Summer Training Field Advisor Survey



Qassim University

Form C1 (1/2)

College of Engineering-Unaizah

Form C1: Summer Training Student Survey

This form is to be completed by the *student* at the end of the Summer Training period. No grades will be recorded to the student unless he supplied this survey statement to the college.

This survey is intended to provide an opportunity to rate your training company and work experience, thereby providing information, which can improve this program. Please rate your feedback using the following rating scale: 5: completely agree, 4: agree to some extent, 3: neutral, 2: not agree to some extent, and 1: strongly not agree

Student's Name:	Date:
Organization Name:	Term:

Торіс	Rate
Question Regarding Education	
My education was sufficient to act effectively through the Summer Training	
My education being put to use	
I learned more by applying my education in the Summer Training	

Question Regarding Supervision	
my field supervisor generally satisfactory	
my field supervisor was available and ready for consultation	
work directions and explanations were adequate	

Question Regarding Company	
I was treated very well by other organization employees	
The organization posses satisfactory equipment and work areas for the training	
The organization offered me very effective training program	
My training work was beneficial to the organization as well for me	
My training program was excellent in comparison to what I've heard about others	
I recommend other students to conduct training in this organization	



Form C1 (2/2)

Qassim University

College of Engineering-Unaizah

Form C1: Summer Training Student Survey

For each of the following questions please write a short statement expressing your opinion.

1- What do you like about this organization?

2- What do you not like about this organization?

3- Any suggestions?

4- Do you have any positive or negative comments on the total ST program?





Qassim University

Form C2

College of Engineering-Unaizah

Form C2: Summer Training Field Advisor Survey

This form is to be completed electronically by the *field advisor* at the end of the Summer Training period.

Training Organization	
field advisor	

Item of Evaluation	النقويــــم* (Evaluation)	عنصر التقويــــم	
	54321		
In general the students of Qassim Univers	ity- college of engine	على وجه العموم أعتبر : : ering طلبةكلية الهندسة بعنيزة جامعة القصيم	
1- Posse enthusiasm and initiation		1- لديهم الحماس والمبادرة	
2- Capable in understanding and dealing with new systems		2- لديهم القدرة على الفهم والتعامل مع الأنظمة الجديدة	
3- Has the ability to judge things and make decisions		3- لديهم القدرة على الحكم على الأمورواتخاذ القرار	
4- Has the ability for learning and searching		4- لديهم القدرة على التعلم والبحث	
5- Posse adequate scientific background		5- يمتلكون الخلفية العلمية المناسبة	
6- Their feeling with responsibility and seriousness was increasing as the training was progress		6- تزايدت جديتهم و إحساسهم بالمسئولية مع تقدم أسابيع التدريب	
7- Are rated the top between other universities' students		7- أقيمهم كأفضل طلاب قمت بتدريبهم	
8- Are rated the bottom between other universities' students		8- أقيمهم كأسوأ طلاب قمت بتدريبهم	
9- Next session, I would recommend having students from this institute		9- مستقبلاً أوصى بتدريب طلاب من جامعة القصيم	
10- How many students did your company/division have this session?		10- كم عدد الطلاب اللذين قامت الشركة /القطاع بتدريبهم هذا العام من جامعة القصيم؟	
11- Is this number of students was (select one) (أختر إجابة) (أختر إجابة)			
أقل من اللازم Less than enough مناسب OK أكثر من اللازم More than enough			



Appendix D

Sample Format of Engineering Training Report





Qassim University

College of Engineering-Unaizah

GE 406 Engineering Training

ENGINEERING TRAINING REPORT

Student's Name:	
Student ID:	
Department:	
Type of Training:	 Design/Consultancy Construction/Manufacturing Operation/Maintenance Production Project Management Research & Development Other
External Supervisor'	s Name:
Training Organization	on:
Training Duration: I	From

Date of submission: _____



Kingdom of Saudi Arabia Qassim University College of Engineering-Unaizah

Table of Contents:

Subject Pa	ge
Table of Contents	
List of Figures	
List of Tables	
Declaration	
Abstract (Training Summary):	
Chapter 1: Introduction of the Training Organization	
Chapter 2: Training Assignments and Responsibilities	
Chapter 3: Learned Engineering Skills	
Chapter 4: Training Benefits and Outcomes	
Chapter 5: Recommendations for Improvement of Engineering	
Training	
References:	
Appendix (figures, charts, brochures, maps, drawings, handouts,	
Annual Reports, etc.)	





Student Declaration

This Training Report is submitted to College of Engineering-Unaizah at the Qassim University, Qassim, in partial fulfillment of the requirements of a Bachelor's degree in _____Engineering.

I declare that this Training Report is prepared by me and the views expressed herein are solely mine. They do not necessarily reflect the policies of the Training Organization where I worked as a Trainee.

Student's Name:Student No:.....

Student's Signatures: Date of Declaration:



Abstract (Training Summary):

The Abstract should summarize the whole training in one page. It should include the purpose, the methodology and the outcomes (results) of the received training.



Pages 1 through the last page include:

<Note: Refer to the General Guidelines for Report Writing at the end of the SAMPLE

Report>

Chapter 1: Introduction of the Training Organization

This Chapter should introduce the Organization. It may include information such as:

- (i) The Organization's Name, Location, Nature of Business etc.
- (ii) The Organization's Administrative Structure
- (iii) Job description of various employees within the Organization
- (iv) Approximate number of employees
- (v) Approximate number of employed engineers and their ratio to total work force, etc.

Chapter 2: Training Responsibilities and Assignments.

This Chapter should list the objectives of the Engineering Training and describe in detail what responsibilities and assignments were given to the Trainee to meet the desired objectives.

Chapter 3: Learned Engineering Skills.

In this Chapter the student Trainee can highlight all the things he learned as part of this training. Apart from technical things, the students can also include things such as teamwork, inter-personnel skills, business relationships etc.

With reference to their particular assignments, the students can include a section on how to relate real life engineering problems to the theoretical concepts introduced to them in class rooms. They can also discuss problems and difficulties faced in carrying out the assignments.



Chapter 4: Training Benefits and Outcomes

This chapter should summarize the main Engineering skills learned during the training. The Chapter should also highlight the benefits of the received training and how it would help the trainee student in the development of his professional career.

Chapter 5: Recommendations for Improvement of Engineering Training

This Chapter will include general recommendations for both the University and the Training Organization about improving the quality of the Training.

It can also include recommendations for future trainees regarding the suitability of the Organization to spend time as a Trainee.

References:

Document any citation to any learned or used computer program, referred books/articles in preparation of this report by consecutive Arabic numerals. List all these references at the end of the report as follows:

- 1- For books Harrow, R. (2005), No Place to Hide, Simon & Schuster, New York.
- 2- For Journal papers

Capizzi, M.T. and Ferguson, R. (2005), "Loyalty trends for the twenty-first century", *Journal of Consumer Marketing*, Vol. 22 No. 2, pp. 72-80.

3- For websites

Castle, B. (2005), "Introduction to web services for remote portlets", available at: <u>http://www-128.ibm.com/developerworks/library/ws-wsrp/</u> (accessed 12 November 2007).

4- For computer programs

Computers and Structures Inc. (2009), ETABS v 9.5.0 – Integrated analysis, design and drafting of building systems, CA.



General Guidelines for Report Writing:

- Students should type their reports with font of Time New Roman, size 14 point on A4 sheets on one side, and with spacing of 1.5 for the main text.
- Students should use size of 16 points for the main headings.
- If the student uses other font types he should be consistent with the selected font type throughout his report.
- Students should use their own language as much as possible.
- Students should report the references they refer to in the text of their report with consecutive numerical numbering. Copying from manuals or books is not acceptable.
- Spell check before submitting the report.
- Avoid repetition.
- The student may include tables, figures, pictures and technical drawings as needed at the end of his report as appendices.
- Figures, Tables and Appendices should be numbered with captions, and they should be referred to in the text.
- The pages should be consecutively numbered with Arabic numerals.

<Students are encouraged to consult any text book on Engineering Report Writing for more information.>