

AEN 2301 INDUSTRIAL TRAINING II (5 CU)

Lecturers: Each student is periodically supervised by lecturers from the department as well as field/ industrial supervisors during the recess term

Course Type: CORE (B.Sc. Agric. Eng II)

Course Credits (CU): 5 CU i.e. 150 Practical Hours per recess term

Course Duration: 10 weeks i.e. 150 PH

COURSE DESCRIPTION

During the fourth term of second year each candidate goes to an industry/firm for training. The main emphasis of training is to understudy the place where the training is done so as to gain work experience that is relevant to professional development prior to graduation. Examples of particular areas for understudying could include: organization, machinery, operations, materials, energy, waste management, By-product utilization. Students fill in log books which are submitted for examination.

2. COURSE OBJECTIVES

The **overall objective** of this course is to develop practical and professional skills required of an Engineer and to link students to prospective employment. Whilst difficult, it is desirable to obtain experience in a range of activities, such as e.g. design office, laboratory and on-site situations. It should also be noted that developing an awareness of general workplace, behavioral and interpersonal skills are important objectives of the training.

The **specific objectives** are to:

- (i) To expose students to engineering experience and knowledge, which is required in industry, where these are not taught in the lecture rooms.
- (ii) To apply the engineering knowledge taught in the lecture rooms in real industrial situations.
- (iii) To experience a feel of the work environment.
- (iv) To gain experience in writing reports in engineering works/projects.
- (v) To expose students to the engineers responsibilities and ethics.
- (vi) To expose the students to future employers and with all the experience and knowledge acquired, it is hoped at the students will be able to choose appropriate work upon graduation

4. COURSE CONTENT

1. Gain ability to describe of daily engineering activities (What is done, Why it is done, How it is done)
2. Understanding and operating selected equipment and machinery in the industry
3. Keeping good record of what the student does each day
4. Gain ability to perform similar tasks with minimum supervision
5. Seeking explanation or advice for activities done
6. Reporting tasks to supervisor(s)
7. Carry out assignments given efficiently and on time
8. Gain ability to organise for work efficiency and effectiveness.
9. Practice punctuality on arrival and leaves at expected time
10. Gain ability to relate theory to practice and analyse efficiency of operations.
11. Gain ability to judge or take decisions
12. Gain ability to communicate technical information
13. Actively contribute to technical input for improvement of services/products

14. Be responsible and put funds/resources to rightful use
15. Interact with colleagues/ workmates
16. Behave maturely and ethically
17. Gain ability to adapt to work environment
18. Organise others and takes leadership role

Obtaining Industrial Placement

The department solicits for, allocates and approves industrial placement for students prior to commencement of work. Fresh approvals should be sought for each different period of Industrial Training. Once an Industrial Training program is agreed upon, a student will be registered with the department. The students are reminded that unregistered placement will be nullified. Students are not allowed to change the place of training during the industrial training period except getting written permissions by the Industrial Training Coordinator. If there is a valid reasons of the change of placement, the students needs to discuss this with the Industrial Training Coordinator.

Industrial Training Visit by the Industrial Training Supervisor

The objective of the Advisers visit to the training place is as follows:

- (i) To visit the students involved with Industrial training and to discuss with them and the officers involved in giving the training on thematter of the training program or other matter concerned. Separate discussions will be held with the Lecturer and the training supervisor as well as with the students.
- (ii) To visit other former graduate of engineering department who are may working in the training organizations, which can give, feed back on the courses offered by the university.
- (iii) To brief the officer of the training organizations on the engineering courses as well as making relations with the department.
- (iv) To survey any new training places for industrial training.
- (v) To discuss on the possibility on accepting the graduate to work with company. The students and the company will be informing on the date and time of the visit.

The Industrial Training Report

An Industrial Training report should be prepared for each period of approved employment. The report is expected to demonstrate development of practical and professional skills in Engineering through technical experience and application of theoretical knowledge. Development of skills in dealing with people, and communication skills form part of the training experience. Students should seek advice from their employers to ensure that no confidential material is included into the report. The student should be able to present the report to prospective employers, as a complement to their degree. The following should be observed:

- i. Length of training
- ii. Preliminary information
- iii. Technical report/diary

References should be made in the text to books, technical papers, standards etc., used during the training period and should be listed. Finally, a conclusion should include comprehensive comments on the type and value of experience gained, and how this relates to your professional career.

A copy of the report should be submitted to your employer, another copy to the department (through the respective supervisor). Students should also retain a personal copy of the report.

Industrial Training Assessment

The industrial training performance assessment will be based on:

- Industrial Training Field Supervisor's report where the student are attached for training (15%)
- Industrial Training Academic Supervisor report through visit or survey (15%)
- Industrial Training Report (70%)

Based on the criteria above, the results of the Industrial Training is as follows:

- a) Pass b) Fail

Students are advised to give a serious consideration in writing their report. The report must be in good quality and explain all the industrial experience and knowledge gained. The report must not be in notes form and figurative form. If the report is not satisfactory, the students may be ask to rewrite the report again until it is in satisfactory manner.