

DEPARTMENT OF MECHANICAL ENGINEERING

**GUIDELINES FOR STUDENTS UNDERGOING
INDUSTRIAL TRAINING**

M.TECH. (Power Plant Engineering and Energy Management)



O.P. Jindal University Raigarh

INTRODUCTION

The guidelines have been prepared as a general reference for all the Faculties/Academies/Centres, students and organisations involved with the O.P. Jindal University's Industrial Training Programme.

As per the regulations of O.P. Jindal University, Raigarh, the student should undergo industrial training for a minimum period of seven weeks during the summer vacation of 2nd year. Before proceeding on Industrial Training, student must seek instructions from the Head of the Department / M.Tech Coordinator or the Faculty, who is the in-charge of Industrial Training.

INDUSTRIAL TRAINING / ACADEMIC ATTACHMENT

Industrial Training refers to work experience that is relevant to professional development prior to post graduation. Industrial Training is an essential component in the development of the practical and professional skills required for an Engineer and an aid to prospective employment. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience. At the end of the Industrial Training, students should be able to improve their knowledge and skills relevant to their areas of specialization and at the same time able to relate, apply and adapt relevant knowledge, concepts and theories within an industrial organization, practice and ethics. With this experience and exposure the students should be able to acquire knowledge and skills to compete in the job market.

OBJECTIVES OF INDUSTRIAL TRAINING PROGRAMME

The objectives of the Industrial Training include:

To provide students an insight regarding internal working of companies. We know, theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visit provides student a practical perspective on the world of work.

It provides students with an opportunity to learn practically through interaction, working methods and employment practices.

It gives them exposure to current work practices as opposed to possibly theoretical knowledge being taught at college.

Industrial training provides an excellent opportunity to interact with industries and know more about industrial environment. Industrial visits are arranged by colleges to students with an objective of providing students functional opportunity in different sectors.

Industrial visit helps to combine theoretical knowledge with industrial knowledge. Industrial realities are opened to the students through industrial visits.

STUDENT

The student is responsible to ensure that all matters relating to the Industrial Training Programme are conducted in an ethical, conscientious, trustworthy and committed manner.

(A) Before Industrial Training

- [1] Submit an application form with latest photographs to the Program coordinator (Training) before the Industrial Training Programme commences.
- [2] Submit one copy of the offer letter for the Industrial Training to the Head of the department or Faculty coordinator (Industrial Training). Students are not allowed to change their Industrial Training after obtaining the approval and confirmation from the Industry.
- [3] To complete the Industrial Training within the specified time based on the Industrial Training Programme schedule.
- [4] To ensure that the Industrial Training is not performed in a family-owned company so as to avoid conflict of interest.

(B) During Industrial Training

- [1] Once the student has reached the training place, he / she must send a mail to the Faculty coordinator (Industrial Training / Department) / Head of the department or Officer (Training / Training and placement) that he / she has joined the training from _____ in the industry (Name) _____ and forward his / her contact nos., E-mail ID and the contact nos. of the company representative.
- [2] During the training, students will be given 3-4 practical problems by the industry in which they are undergoing training. In case the industry do not give them the problems, the students will themselves formulate minimum three problems and maximum four problems and carry out detailed study on them and recommend the optimum solution based on their theory knowledge.
- [3] To maintain discipline and abide by all rules and regulations enforced by the organization and to ensure **FULL** attendance during the Industrial Training duration.
- [4] To carry out the Industrial Training in an ethical and professional manner and to uphold the reputation of O.P. Jindal University Raigarh, at all times.
- [5] To maintain confidentiality and to not disseminate / share any information related to the organization to third parties.
- [6] To be responsible for maintaining the security of properties belonging to the organization.

(C) After Industrial Training

- [1] To ensure that all relevant documents are completed and returned within the specified time.
- [2] To ensure that all documents related to Industrial Training Programme are completed and kept in the Course file.
- [3] To provide the Executive Summary of Industrial Training Programme using the format/ template provided and submit a copy to the program coordinator within one month after the Industrial Training Programme ends.
- [4] To send letter of appreciation to organisations within two (2) weeks after the Industrial Training Programme ends.

ASSESSMENT COMPONENTS

Assessment within the Industrial Training context aims to evaluate the student's work quality and appropriateness to the field of study with reference to the learning outcomes of the Industrial Training Programme. Students should be evaluated by both faculty Supervisor (OPJU) and Industry expert (HOD of Plant). Evaluation methods used may consist of the following:

- ✓ Evaluation report from industry supervisor
- ✓ Evaluation report from faculty supervisor
- ✓ Industrial Training report
- ✓ Log book/Attendance record
- ✓ Observation at the work place
- ✓ Presentation by the student

DISCIPLINARY PROCEDURES DURING INDUSTRIAL TRAINING PROGRAMME

Within the training period, the student is wholly responsible to the organisation where he or she has been placed. This means that the student must observe specified office hours, and must adhere to all rules and regulations of the organisation, just like the other staff within the organisation, during the entire training period.

DEPARTMENTAL REPORT

When the training of the student in a particular department / section / shop of an industry is completed, he / she should write departmental report. Report should include description of the department / Section / Shop, the processes and procedures followed in it. Individual items of equipment, special attachment, indigenously adopted tools should be described. Personnel & any other human resource features should be highlighted. Drawings, sketches, specification of equipment, used, should be given wherever essential. The report should also contain entire studies & discussions carried out by the students in addition to what he / she has observed during his / her day to day work. The departmental report should be signed by the student and also by his officer-in-charge of that department / section / shop.

The report must include the following:

- (a) The basic history/introduction of the industry.
- (b) The sequence of operations followed/ systems introduced for the production.
- (c) The layout of various workshop/floors or the labs and admin section of the industry.
- (d) The major equipment used for the production / computer configuration required for the loading the used software's.
- (e) The infrastructure available.
- (f) The movement of material (raw, semi finished and finished product), not applicable in case of software industry.
- (g) The formulation of 3 to 4 practical problems.
- (h) Data required to formulate the problems.
- (i) Analysis of the data, steps required and commands used in case of software industry.
- (j) Suggestions made based on the analysis of the data.
- (k) Recommendations.
- (l) Certificate from the industry for the period of training undergone.

The final report must be at-least 25 to 30 pages for the student undergoing 50 days training. In case no. of students undergoing training in the same industry are more than one, each student will prepare his / her report separately.

FORMAT OF INDUSTRIAL TRAINING REPORT

The following titles must be incorporated in the final industrial training report:

1. Preface/Acknowledgement
2. Certificate with Signatures and Seal of the Industry Person
3. Contents/Index
4. Introduction about the Industry
5. Training Schedule
6. Work Done / Observations
7. Specific Assignment / Project Handled
8. Learning after Training
9. Summary

EVALUATION THROUGH SEMINAR PRESENTATION

The students will present his report through seminar, which will be held by an expert committee constituted by the concerned department as per norms of the institute. The evaluation through seminar presentation will be based on the following criteria.

- a) Quality of material presented.
- b) Effectiveness of presentation.
- c) Depth of knowledge and skills.

Upon completion of these training programme, students are expected to demonstrate the following graduates attributes:

- Engineering Knowledge
- Problem analysis
- Design/development of solutions
- Conduct investigations of complex problems
- Modern tool usage, The engineer and society
- Individual and Team Work
- Communication and Project Management and Finance

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