# **ME-706- Minor Project**

Provision of Minor project is made as preparation phase-I for major project or to take it as an independent small project. For details of project see ME-805- Major project

### **ME-707- Industrial Training**

#### **Objective of Industrial Training**

The objective of undertaking industrial training is to provide work experience so that student's engineering knowledge is enhanced and employment prospects are improved. The student should take this course as a window to the real World and should try to learn as much as possible from real life experiences by involving and interacting with industry staff. Industrial training also provides an opportunity to students to select an engineering problem and possibly an industry guide for their Major Project in final semester.

#### Scheme of Studies:

Duration: Minimum 2 weeks in summer break after VI semester, assessment to be done in VII semester

#### **Scheme of Examination:**

For the assessment of industrial training undertaken by the students, following components are considered with their weightage.

(a) Term Work in Industry	Marks Allotted
Attendance and General Discipline	5
Daily diary Maintenance	5
Initiative and participative attitude during training	10
Assessment of training by Industrial Supervisor	10
Total 30*	

(b) Practical/Oral Examination (Viva-Voce) in Institution		Marks Allotted
1. Training Report	15	
2. Seminar and cross questioning (defense)	15	
Total 30		

<sup>\* -</sup> Marks of various components in industry should be awarded by the I/c of training in Industry but in special circumstances if not awarded by the industry then faculty in charge /T.P.O. will give the marks.

During training students will prepare a first draft of training report in consultation with section in charge. After training they will prepare final draft with the help of T.P.O. /Faculty of the Institute. Then they will present a seminar on their training and they will face viva-voce on training in the Institute.

## **Learning through Industrial Training**

During industrial training students must observe following to enrich their learning:

- Industrial environment and work culture.
- Organizational structure and inter personal communication.
- Machines/equipment/instrument-their working and specifications.
- Product development procedure and phases.
- Project Planning, monitoring and control.
- Quality control and assurance.
- Maintenance system
- Costing system
- Stores and purchase systems.
- Layout of Computer/EDP/MIS centers.
- Roles and responsibilities of different categories of personnel.
- Customer services.
- Problems related to various areas of work etc. Students are supposed to acquire the knowledge on above by-
- Direct Observations without disturbing personnel at work.
- Interaction with officials at the workplace in free/ tea time
- Study of Literature at the workplace (e.g. User Manual, standards, processes, schedules, etc.)
- "Hand's on" experience
- Undertaking/assisting project work.
- Solving problems at the work place.
- Presenting a seminar
- Participating in group meeting/discussion.
- Gathering primary and secondary data/information through various sources, storage,retrieval and analysis of the gathered data.
- Assisting official and managers in their working
- Undertaking a short action research work.
- Consulting current technical journals and periodicals in the library.
- Discussion with peers.

#### **Daily Diary-Industrial Training**

Industry / work place			
Dates Brief of observations a consulted etc.	made, work done, problem/pi	roject undertaken, discussion held, lite	rature
Signature of Supervisor (TPO/Faculty)	Signature of Trainee	Signature of Official in charge for Trg. In Indutry.	

### **Supervision of Industrial Training**

Faculty and TPO are supposed to plan industrial training in such a manner that students get exposure on most of the above area in the field.

One faculty member or TPO will plan industrial training of students in consultation with training manager of the industry (work place) as per the predefined objectives of training.

Monitoring visits will be made by training and placement officer/faculty in-charge for the group of students, of the college during training.

#### Guidance to the faculty / TPO for Planning and implementing the Industrial Training

Keeping in view the need of the contents, the industrial training program, which is spread to minimum 2 weeks duration, has to be designed in consultation with the authorities of the work place; Following are some of the salient points:

- Spelling out the objectives of the industrial training in behavioral terms and same is informed in advance to the 1) students, 2) authorities of the work place and 3) supervising faculty members.
- Discussing and preparing students for the training for which meetings with the students has to be planned.
- Meeting with industrial personnel and orienting them regarding the objective of the training and the expectations of the program.
- Correspondence with the authorities of the work place.
- Orientation classes for students on how to make the training most beneficial-monitoring daily diary, writing weekly reports, how to interact with various categories of industrial personnel, how to behave and undertake responsibilities, how to gather information form the workplace, ethics etc.
- Guiding students to make individual plans (week wise/ day wise) to undertake industrial training.,
- Developing a system of maintaining training records, by teachers for every batch of students for convenient retrieval.
- Inviting industrial personnel to deliver lectures on some aspects of training.

#### Action plan for planning stages at the Institutional Level

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#### S.No. Activity Commencing Week Finishing week Remark

- 1. Meeting with Principal
- 2. Meeting with colleagues
- 3. Correspondence with work place(Industry concerned)
- 4. Meeting with authorities of work place
- 5. Orientation of students for industry training
- 6. Scrutinizing individual training plan of students.
- 7. Commencement of individual training
- 8. First monitoring of industrial training
- 9. Second monitoring of industrial training
- 10. Finalization of Training report
- 11. Evaluation of performance at industry level
- 12. Evaluation of Industry Program in the Institutions.