C24_ Curriculum DIPLOMA IN MECHANICAL ENGINEERING



OFFERED BY STATE BOARD OF TECHNICAL EDUCATION & TRAINING

TELANGANA: HYDERABAD

ME-601-INDUSTRIAL TRAINING

| Course Title: | Industrial Training | Course Code | ME-601 |
|------------------------------------|---------------------|----------------|-----------|
| Semester | VI Semester | Course Group | Practical |
| Teaching Scheme in Periods (L:T:P) | 0:0:0 | Credits | 20 |
| Methodology | Training | Total Duration | 6 months |
| CIE | 900 Marks | SEE | 100 Marks |

This course requires the skills of handling electrical tools, accessories and performing wiring connections

Rationale: Industrial training is introduced in the VI semester for the students as a part of the program to make the passed out students industry ready thus saving the training and apprenticeship needs in the industry and also help in capacity building of the Telangana state and the country.

Course Objective:

To enable the students to

- 1. Acquaint with Industry environment and culture.
- 2. Develop professional skills
- 3. Enhance the usage skills of modern tools
- 4. Develop Communication and leadership skills.
- 5. Encourage entrepreneurship

Course Outcomes:

| CO1 | Appreciate the organizational setup and hierarchy |
|-----|--|
| CO2 | Practice the use of Resource optimization techniques |
| CO3 | Develop core engineering skills |
| CO4 | Develop an understanding of solutions for Environmental issues in the industry |
| CO5 | Get acquainted to industry culture and professionalism |

Evaluation:

1. The student should submit a report describing the profile of the company, Nature of the job assigned to him /her and other details in a standard format duly attested and approved by the head of the industry after two weeks and before Four weeks from the date of joining through e mail. Hard copy of the report may be submitted in person or by post.

- 2. A candidate shall be assessed twice in the spell of industrial training i.e. at the end of third month and finally before he/she completed the industrial training
- 3. The assessment shall be carried out by a committee comprising of a representative of the Industry where the candidate is undergoing training and a faculty member from the respective program from the Polytechnic.

For Institution level evaluation of industrial training, a committee consisting following faculty members (1) Head of Dept. concerned.(2) Faculty member who assessed the student in the industry (3) any other staff member of departmentconcerned may be formed.

| Inst | itution Level Evaluation Scho | eme | |
|----------|-----------------------------------|-------|------------------------------|
| Sl No | Criteria | Marks | Time |
| 1 | 1 st Report Submission | 50 | within 4 Weeks |
| 2 | Seminar-I | 50 | 9th to 10 th week |
| 3 | 2 nd Report Submission | 50 | Within 12 weeks |
| 4 | Log book | 100 | |
| 5 | Seminar-II | 50 | Before Viva-Voce |
| | Institute Evaluation Total | 300 | |
| Sem | nester End Examination | | |
| 1 | Viva-Voce | 50 | After 15 weeks |
| 2 | Demonstration of skills | 50 | |
| | Total | 100 | |

Note: For obtaining Provisional certificate the student has to submit training completion certificate from the industry after six months of training.

Assessment parameters and Blue Print of Marks for Industry Evaluation

| Sl No | Learning Parameter | Marks |
|-------------------------------------|---|-------|
| 1 | Attendance and punctuality | 40 |
| 2 | Familiarity of tools and material | 60 |
| 3 | Engineering skills | 100 |
| 4 | Application of knowledge & Problem solving skills | 100 |
| 5 | Comprehension and observation | 20 |
| 6 | Professionalism/Professional ethics | 40 |
| 7 | Safety and environmental consciousness | 20 |
| 8 | Communication skills | 40 |
| 9 | Supervisory skills | 100 |
| 10 | General conduct during the period | 80 |
| Total marks for Industry Evaluation | | 600 |
| Institute Evaluation | | 300 |
| Semester End Examination/Viva-Voce | | 100 |
| TOTAL | | 1000 |

Learning Outcomes

1.0 Observe Safety Precautions and rules of the industry

- 1.1. Know the importance of safety in industries
- 1.2. Understand the safety about personnel protection, equipment protection
- 1.3. Know the usage of various safety devices
- 1.4. Precautionary measures to be taken.

2.0 Appreciate organizational set up from top executive to workmen level

- 2.1. Acquaint with the function of each department/section
- 2.2. Comprehend the inter relationship among various department/sections.

3.0. Observe the end product ,variousComponents/ materials used in the production and identify their source.

- 3.1. Identify the various stages involved in the assembly and production of end product.
- 3.2. List the final products, their composition and its commercial importance, uses and Applications.

4.0. Develop an Understanding of various stages involved in processing, sequential arrangement of different equipment.

- 4.1. Represent the whole process and each sub processes with a flow diagram
- 4.2. Observe and appreciate the resource optimization of space (the arrangement of various equipment and machinery in systematic manner in a less possible area of site), Electricity, Men machinery, money and Time.

5.0. Explain various analytical methods used in the quality control department

- 5.1. Practice the Testing methods for quality assurance and bench mark standards
- 5.2. Practice use of various tools, instruments used for quality checking.

6.0. Observe trouble shooting /servicing /maintenance techniques used during the production

- 6.1. Observe preventive precautions and maintenance of each equipment in the unit
- 6.2. Follow Staring and shutting down procedures for the equipment in the unit.

7.0. Identify the various pollutants emitted from the plant/Industry.

- 7.1. State effects of pollutants.
- 7.2. Explain handling methods of E waste and pollutants disposal