C21_ 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	Course Group	Practical
Teaching Scheme in Periods(L:T:P)	---	Credits	25
Methodology	Practical	Total Training Period	6 Months

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:

CO	Outcome
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 and assessment of Industrial Training**, shall be done and marks be awarded in the following manner, provided the candidates concerned have put up minimum 90% attendance of Industrial Training.

Mid-I Industrial assessment at Industry	: 300 marks
Mid-II Industrial assessment at Industry	: 300 marks
Institutional Internal Evaluation	: 300 marks
Semester End Examination (Seminar/viva-voce at Institution)	: 100 marks
TOTAL	1000 marks

Mid – I & II Industrial Assessment parameters at Industry:

Sl No	Learning Parameter	Assessment I (First Quarter)	Assessment II (Second Quarter)
1	Attendance and punctuality	20	20
2	Familiarity of tools and material	30	30
3	Engineering skills	50	50
4	Application of knowledge & Problem solving skills	50	50
5	Comprehension and observation	10	10
6	Professionalism/Professional ethics	20	20
7	Safety and environmental consciousness	10	10
8	Communication skills	20	20
9	Supervisory skills	50	50
10	General conduct during the period	40	40
Total marks for Industry Evaluation		300	300
		600 marks	

Institutional internal Assessment parameters

Institution Level Evaluation Scheme			
Sl No	**Criteria**	**Marks**	**Time**
1	1st Report Submission	50	After 8 Weeks
2	Seminar-I	50	9th to 10th week
3	2nd Report Submission	50	After 18 weeks
4	Log book	100	Before Viva-Voce
5	Seminar-II	50	Before Viva-Voce
	Institute Evaluation Total	**300**	
Semester End Examination			
1	Viva-Voce	50	After 24 weeks
2	Presentation/Demonstration of skills	50	
	Total	**100**	

- The assessment at the institute level will be done by a minimum of three members i.e. Internal Faculty, Industrial Experts/External Examiner and H.O.D. and the same shall be averaged.

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, various Components/ 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