C24_ Curriculum

DIPLOMA IN CIVIL ENGINEERING

OFFERED BY

STATE BOARD OF TECHNICAL EDUCATION & TRAINING,

TELANGANA: HYDERABAD

CE-601 INDUSTRIAL TRAINING

Course Title:	Industrial Training	Course Code	CE-601
Semester:	VI	Course Group	Practical
Teaching Scheme in Periods(L:T:P)	---	Credits	20
Methodology	Practical	Total Training Period	6 Months

Rationale: Industrial 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	CO/PO Mapping
CO1	Appreciate the organizational setup and hierarchy	5,6,7,8,9,10
CO2	Practice the use of Resource optimization techniques	5,6,7,8,9,10
CO3	Develop core engineering skills	5,6,7,8,9,10
CO4	Develop an understanding of solutions for Environmental issues in the industry	5,6,7,8,9,10
CO5	Get acquainted to industry culture and professionalism	5,6,7,8,9,10

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 department concerned may be formed.

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

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

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
Semester End Examination/Viva-Voce		100
Institute Evaluation		300
TOTAL		1000

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	

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 departments/sections.

3.0. Observe the construction and various Components/ materials used in the construction and Identify their source.

3.1. Identify the various phases involved in the construction project.

3.2. List the various stages of the project, its commercial importance, uses and Applications.

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

4.1. Represent the whole process and each sub processes with a flow diagram, detail 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), Men.materials, machinery, money and Time.

5.0 Explain various analytical methods used in the quality control process

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.

6.1Observe trouble shooting /servicing /maintenance techniques used during the construction

6.1. Observe preventive precautions and maintenance of each equipment in the unit

6.2. Follow Servicing procedures for the equipment in the construction 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

	Basic knowledge	Discipline Knowledge	Experiments and practice	Engineering Tools	Engineer and society	Environment & sustainability	Ethics	Individual and Team work	Communication	Lifelong learning	Linked PO
CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	
CO1	1	3	3	3	2			3	3	1	1,2,3,4,5,8,9,10
CO2	1	3	3	3	2	1	1	3	3	3	1,2,3,4,5,6,7,8,9,10
CO3	1	3	3	3	2	2	3	3	3	3	1,2,3,4,5,6,7,8,9,10
CO4	1	3	3	3	2	2	3	3	3	3	1,2,3,4,5,6,7,8,9,10
CO5	1	3	3	3	2	2	3	3	3	3	1,2,3,4,5,6,7,8,9,10

During Industrial Training the candidate shall put in a minimum of 90% attendance. The Project report should be signed by the Organizational Representative and contain the observations made by the Candidate.

The Industrial Training shall carry 1000 marks and pass marks are 50% a candidate failing to secure the minimum marks should repeat the training.

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