

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma in Fabrication Technology

Semester: 3

Subject Code

Subject Name FABRICATION TECHNOLOGY PRACTICES - 1

Sr. No.	Course content
1.	DEMONSTRATION & STUDY (REPORT / OBSERVATION WRITING) : <ol style="list-style-type: none">1. Study of structural fabrication drawing.2. Demonstration & study of welding safety equipment & clothing3. Demonstration & study of marking & measuring equipment and tools4. Demonstration & study of various types of commercial forms of metal5. Study of material test certificate (MTC)with typical example6. Demonstration of cutting of various commercial forms of metal by using various tools, equipments & machines
2.	JOB PREPARATION (WRITE SEQUENCE AND PARAMETERS OF OPERATION) : <ol style="list-style-type: none">1. Job-1 Prepare a job of square frame by cutting at 90°2. Job-2 Prepare a job of square frame by cutting at 45°3. Job-3 Preparation of one job which covers various operation of structural fabrication e.g. struts, or columns of factories , or furniture4. (which include operation e.g. , straightening ,marking, cutting, edge preparation, , forming , joining /inspection / testing).
3.	SEMINAR & PRESENTATION & GROUP DISCUSSION : <ol style="list-style-type: none">1. Prepare a Seminar using Power Point Presentation / Transparencies on the topic covered in syllabus / beyond the syllabus2. Give 10 minutes presentation3. Group discussion
4.	PREPARATION OF MODELS , CHARTS , QUIZ COMPETITION & SLOGANS (GROUP / INDIVIDUAL)
5.	INDUSTRIAL VISIT : Term work content of industrial visit report should also include following <ol style="list-style-type: none">a) brief detail of industry visitedb) Type, location, product, rough layout, human resource, etc of industry.c) Details, description and broads specification of machinery / process observed.d) Safety norms and precautions observede) Student on observation on industrial environment, culture and attitudef) Any other detail /observation asked by accompanying faculty. <ol style="list-style-type: none">1. Industrial visit of structural fabrication industry.

6.	SHEET & SKETCH WORK : <ol style="list-style-type: none"> 1. Prepare a sheet base on fabrication calculation (geometric problem) 2. Prepare a sheet for mensuration 3. Prepare a sheet for commercial forms of metal 4. Prepare a sheet for one typical structural drawing
7.	REPORT WRITING : <ol style="list-style-type: none"> 1. Write a report on storing & handling of material 2. Write a report on structural joining process. 3. Write a report on BIS – 800. 4. Write a report on Lining, Leveling & Plumbing. 5. Write a report on different cutting methods used in structural fabrication.
8.	BEYOND SYLLEBUS ACTIVITIES (DEVELOP CREATIVE & INNOVATIVE IDEAS AMONG STUDENTS) : Display Article, Information, Sketch, under Knowledge Zone(K-Zone), Inspiration Zone(I-Zone) & Creative zone(C-Zone)
9.	LITERATURE SURVEY : <ol style="list-style-type: none"> 1. Library Assignment 2. Internet Surfing 3. Refer Product Pamphlets 4. Technical Magazines
10.	SHOP TALK : 10 minutes presentation on shop floor / laboratory during the preparation of job / laboratory experience by the students laboratory experience by the students
11.	AUDIO VISUAL AIDS : <ol style="list-style-type: none"> 1. Prepare Audio Cassette 2. Photograph Lab Manual 3. Technical Video Download
12.	PAPER SOLUTION
13.	SCHOOL WITHIN SCHOOL : 1.Guiding / Sharing /Mentoring the know-how by meritorious students to lower performing students
14.	SELF LEARNING : <ol style="list-style-type: none"> 1. Contact with field expert ,seniors, alumni and get further know-how individually or in a group. 2. Read related book/magazine/article/literature and share the content.

LABORATORY EXPERIENCE :

NOTES:

1. Term work report content of each experience should also include following.
 - a) Experience description/ data and objective.
 - b) A skill which is/are expected to be developed in student after competition of experience.
 - c) Drawing of experience / set up with labels / nomenclature to carry out the experience.
 - d) The specification of machine / equipment / devices / tools / instruments/items / elements which is / are used to carry out and to check experience.
 - e) Process parameters / set up settings values applied to carry out experience
 - f) Steps / process description to execute the experience.
 - g) Observation
 - h) Information on resented machine / equipment / devices / tools/ instrument/ item available. In market to carry out the experience.
 - i) Special / additional notes or remarks.
2. Term work report of student of regular more should exclude distance learning manual, photocopy, printed content, etc. focus should be on developing the term work as original efforts of student.
3. Term work content of industrial visit report should also include following
 - g) brief detail of industry visited
 - h) Type, location, product, rough layout, human resource, etc of industry.
 - i) Details, description and broads specification of machinery / process observed.
 - j) Safety norms and precautions observed
 - k) Student on observation on industrial environment, culture and attitude
 - l) Any other detail /observation asked by accompanying faculty.
4. Term work also include experience logbook duly certified by subject teacher.