

INSTITUTE	DIPLOMA STUDIES
PROGRAM	DIPLOMA ENGINEERING (CHEMICAL ENGINEERING)
SEMESTER	1
COURSE TITLE	MECHANICAL WORKSHOP
COURSE CODE	09ME2102
COURSE CREDITS	2

Objective:

- 1 Workshop training is a pillar of the real industrial situation which supports to grow and boost relevant technical hand skills required by the technician working in the various engineering trades and workshops. Irrespective of branch the use of workshop performs in day to day industrial as well domestic life helps to soften the problems.

Course Outcomes: After completion of this course, student will be able to:

- 1 Choice the appropriate tools essential for definite operation.
- 2 Know applications of hand tools and power tools.
- 3 Know the safety actions required to be taken while using the tools.
- 4 Understand the processes of machine tools

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	4	0	30	20	25	25
Contents : Unit	Topics						Contact Hours
Total Hours							

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	To know and gain worth of mechanical engineering in diverse fields of engineering To know and gain worth of mechanical engineering in diverse fields of engineering	2
2	To prepare plant layout for workshop. To prepare plant layout for workshop.	4
3	To prepare job a by using files and hacksaw. To prepare job a by using files and hacksaw.	12

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
4	Hands on practice of punch and hammer. Hands on practice of punch and hammer.	4
5	Demonstration of carpentry tools. Demonstration of carpentry tools.	2
6	To prepare carpentry job (wood material) as per given diagram. To prepare carpentry job (wood material) as per given diagram.	10
7	To. Perform experiment on spot welding. To. Perform experiment on spot welding.	4
8	To perform experiment on arc welding. To perform experiment on arc welding.	4
9	To perform experiment on tin smithy. To perform experiment on tin smithy.	6
10	To demonstration of plumbing tools. To demonstration of plumbing tools.	2
11	Hands on the practice of power tools. Hands on the practice of power tools.	2
12	To interpret the use of drilling machine and to prepare job. To interpret the use of drilling machine and to prepare job.	4
Total Hours		56

Textbook :

- 1 Workshop Technology, Kr Vinayaka, Sapna Book House, 2015

References:

- 1 Workshop Practice, Workshop Practice, H.S. Bawa, McGraw Hill , 2009

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
28.00	32.00	40.00			

Instructional Method:

- 1 The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory.
- 2 Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

Supplementary Resources:

- 1 <https://www.aboutmech.com/2020/09/workshop-technology.html>