



C. U. SHAH UNIVERSITY
Wadhwan City

FACULTY OF: - Technology and Engineering
DEPARTMENT OF: - MECH/AUTO/CIVIL
SEMESTER: - I
CODE: - 4TE01WPR1
NAME – Workshop Practice* (WPR)

Teaching and Evaluation Scheme :-

| Subject Code | Name of the Subject | Teaching Scheme (Hours) | | | | Credits | Evaluation Scheme | | | | | | | |
|--------------|---------------------|-------------------------|----|----|-------|---------|-------------------|-----|-----------------|-----|-------------------|----|------------|-------|
| | | Th | Tu | Pr | Total | | Theory | | | | Practical (Marks) | | | Total |
| | | | | | | | Sessional Exam | | University Exam | | Internal | | University | |
| | | | | | | | Marks | Hrs | Marks | Hrs | Pr/Viva | TW | Pr | |
| 4TE01WPR1 | Workshop Practice | 0 | 0 | 2 | 2 | 1 | - | - | - | - | 50 | 50 | --- | 100 |

Objectives:-

- The objective is to impart training to help the students to develop engineering skill sets.
- This exercise also aims in inculcating respect for physical work and hard labor in addition to some amount of value addition by getting exposed to interdisciplinary engineering domains.

Prerequisites:-

- Looking to the wide field of the engineering, there was a need of comprehensive course.

Course outline:-

| Sr. No. | Course Content | No. of Hours |
|---------|--|--------------|
| 1 | Introduction: Introduction to Workshop | 02 |
| 2 | Fitting • Use and setting of fitting tools like hacksaw for chipping, cutting, filing, marking, center punching, drilling, tapping. Term work to include one job involving following operations : filing to size, one simple male- female joint, drilling and taping | 08 |
| 3 | Carpentry • Use and setting of hand tools like tenonsaws, jack planes, chisels and gauges for construction of various joints, wood turning and modern wood turning methods. • Term work to include one carpentry job involving a joint and report on demonstration of a job involving wood turning | 06 |
| 4 | Smithy • At least one workshop practice job (Lifting hook and handle) is to be demonstrated. | 02 |
| 5 | Machine Shop • At least one turning job is to be demonstrated. | 02 |
| 6 | Welding | 02 |



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| | | |
|---|---|-----------|
| | • Edge preparation for welding jobs. Arc welding for different job like, Lap welding of two plates, butt welding of plates with simple cover, arc welding to join plates at right angles. | |
| 7 | Tin smithy • Use of sheet metal, working hand tools, cutting and bending | 04 |
| 8 | Plumbing • Use of plumbing tools, spanners, wrenches, threading dies, demonstration of preparation of a domestic line involving fixing of a water tap and use of coupling, elbow, tee, and union etc. | 02 |
| 9 | Foundry Preparation of Sand Mould, Types of Patterns, Furnaces. | 02 |

** Offered to the Mechanical, Automobile and Civil Engineering discipline.*

Learning Outcomes: -

- Students will get on hand training regarding various practical applications like Fitting, Carpentry, Welding, Electrical board wiring, PCB laboratory exercises, Hardware and networking.
- Practical method of explaining the core subject and the philosophy of the subject.

Books Recommended:-

1. A Course in Workshop Technology, Vol – I by **B. S. Raghuvanshi**, Dhanapat Rai and Sons.
2. Elements of Workshop Technology, Vol – I, **Hajara Choudhari**, Media Promoters & Publishers Pvt. Ltd.
3. Workshop Technology, Vol – I by **Gupta and Kaushik**, New Heights.
4. Workshop Technology, Vol – I, **Chapman**, The English Language Book Society.
5. Workshop Technology, Vol.-I by **H.S.Bawa**, TMH Publications, New Delhi.
6. Elements Of Workshop Technology by **S.K.Hajra Choudhary**,Media Promoters & Publishers Pvt. Ltd.
7. Workshop Technology, Vol I, II and III by **Chandola S.P.**, Oxford and IBH Publishing Co. Pvt. Ltd.,