



## Mechanical Workshop Praticice Code: WSP1201

Mechanical Workshop is expected to know basic workshop practice like Wood working and Material processing techniques. The students are required to identify, operate and control various machines and also they are required to select and use various tools and equipments related to Wood working, metal joining and shaping processes.

### OBJECTIVES:

The student will able to

- Know basic workshop processes
- Read and interpret job drawing
- Identify, select and use various marking, measuring, holding, striking and cutting tools
- Operate, control different machines and equipments
- Inspect the job for specified dimensions
- Produce jobs as per specified dimensions
- Adopt safety practices while working on various machines

Week	Content	Hours	
		Theory	Practical
1 & 2	<b>CARPENTRY SHOP</b> 1. Introduction 2. Various types of woods 3. Different types of tools, machines and accessories 4. Demonstration of different wood working tools / machines 5. Demonstration of different wood working processes, like planning, marking, chiseling, grooving, turning of wood etc 6. One job involving any one joint like mortise and tenon dovetail, bridle, half lap etc.	2	4
3 & 4	<b>WELDINGSHOP</b> 1. Introduction 2. Types of welding, ARC welding, Gas welding, Gas Cutting 3. Welding of dissimilar materials, Selection of welding rod material, Size of welding rod and work piece 4. Different types of flame 5. Elementary symbolic representation 6. Safety precautions in welding equipments 7. Demonstration of different welding tools / machines 8. Demonstration on Arc Welding, Gas Welding, gas	2	4



	cutting and rebuilding of broken parts with welding 9. One job involving butt and lap joint		
5 & 6	<b>MACHINE SHOP</b> 1. Introduction about various machine tools 2. Principal parts of a lathe 3. Measuring instruments 4. Cutting parameters 5. Tool materials 6. Lathe operations 7. Safety precautions 8. One job involving lathe operations.	2	4
7	Project		

### References:

1. Kent's Mechanical Engineering Hand book, John Wiley and Sons, New York
2. Workshop Technology by H.S.Bawa, Tata McGraw Hill Publishers
3. Workshop Technology by S.K. Hajara Chaudhary, Media Promoters and Publishers.