

Workshop Practice Lab

Subject overview:

The study of workshop practice acts as the basis for further technical studies. General workshop practices are included in the curriculum in order to provide hands on experience about the use of different engineering materials, tools, equipments and processes that are common in engineering field.




The Institute has a modern well established workshop, equipped with various traditional as well as most modern machines and latest tools and instruments. It imparts basic knowledge of various tools and their use in different sections of manufacture such as Fitting, Carpentry, Smithy, Electrical, Soldering, Plumbing Shop etc.

At the end of the practice, the students will be able ;

- To identify the hand tools and instruments,
- To acquire measuring skills as well as practical skills in the trades,



<p><u>FITTING SHOP</u></p>	
<p>Fitting is a manufacturing process which refers to assembling of parts together and removing metal to secure necessary fit. Various type of holding tools(Bench vice), Marking and measuring tools(Scriber , Divider , Caliper, Punch) , Cutting tools (Hacksaw, Chisels) , Finishing tools(Files, Reamers), Miscellaneous tools(Ball peen hammer) are used for Fitting operation.</p>	
	<p><u>CARPENTRY SHOP</u></p>
	<p>Carpentry may be designed as the process of making wooden articles and component. Carpentry involves cutting, shaping and fastening wood and other materials together to produce a finished product. Various types of Marking and Measuring tools (Marking gauge, Try square), Holding tools (Carpenter's vice), Planing tools (Jack plane), Cutting tools (Saw, Chisels) are used in carpentry shop.</p>
<p><u>SMITHY SHOP</u></p>	
<p>Smithy is defined to handle relatively small jobs only such as those that can be heated in hearth or open fire. It is the process of shaping metals by impact or very high pressure. Tools and equipments like Smith Forge (For heating Purpose), Anvil (For supporting the work), Swage block (For mainly Squaring, sizing, bending and forming operation) etc are used for operation.</p>	

	<p style="text-align: right;"><u>ELECTRICAL SHOP</u></p> <p>Electrical shop gives an exposure to student for basic electric devices and fittings as well as intricacies involved in domestic and industrial electrical wiring. Practical's like identification of phase, neutral and earth of domestic appliances and their connection to two pin/three pin plugs are performed by the students.</p>
<p><u>PLUMBING SHOP</u></p> <p>Plumbing deals with the laying of a pipeline. Study of Pipe joints, Pipe fitting, Cutting, Threading and Laying of pipes. Different tools and equipment like pipe vice, pipe bending machine, dies and die holder, plumbing vice, cutting dies, pipe wrench, ball peen hammer etc. are used for plumbing operations on G.I. pipe.</p>	
	<p style="text-align: right;"><u>SOLDERING SHOP</u></p> <p>Soldering is the process in which two or more metal items are joined together by melting and flowing a filler metal (solder) into the joint. The tools like Soldering lead, Soldering Iron, Tester, Solder Cleaner and Clipper are used in Soldering shop. Soldering is used in electronics (for PCBs) and metalwork from flashing to jewelry.</p>

OVERVIEW OF WORKSHOP PRACTICE



SETUP 1: FITTING SHOP



SETUP 2: CARPENTRY SHOP



SETUP 3: SMITHY SHOP



SETUP 4: ELECTRICAL SHOP



SETUP 5: PLUMBING SHOP



SETUP 6: SOLDERING SHOP

