

BVM ENGINEERING COLLEGE [AN AUTONOMOUS INSTITUTION]**ES113: WORKSHOP PRACTICES – I
CREDITS - 2 (LTP:0,0,2)****Course Objective:**

Workshop practice is the backbone of the real industrial environment which helps to develop and enhance relevant technical hands on skills required by the engineers working in the various engineering industries and workshops. The use of workshop practices in day to day industrial as well as domestic situation is of primordial importance for production engineers. This course is tailored to give the production engineers a considerable hands on feel of industrial shop floor practices.

Teaching and Assessment Scheme:

Teaching Scheme (Hours per week)			Credits	Assessment Scheme				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE	CE	ESE	CE		
0	0	4	2	0	0	40	60	100

Contents and Practice:

Unit No.	Topics	Teaching Hours
1	Introduction to various shops / sections and workshop layouts. Safety norms safety equipment's to be followed in a workshop.	04
2	Demonstration & Practice on Carpentry, Fitting, Welding, Tin smithy, Plumbing, Machining and machine tools / equipment.	36
3	Students are required to prepare one job each in the following shops: Fitting, Carpentry, Tin smithy, Electric Arc welding / Resistance welding.	16
4	Assembly and disassembly of simple products.	
Total		56

List of References:

- Hajra Choudhury S.K., Hajra Choudhury A.K. and Nirjhar Roy S.K., "*Elements of Workshop Technology*", Vol. I 2008 and Vol. II 2010, Media promoters and publishers private limited, Mumbai.
- Kalpakjian S. And Steven S. Schmid, "*Manufacturing Engineering and Technology*", 4th edition, Pearson Education India Edition, 2002.
- Gowri P. Hariharan and A. Suresh Babu, "*Manufacturing Technology – I*" Pearson Education, 2008.
- Roy A. Lindberg, "*Processes and Materials of Manufacture*", 4th edition, Prentice Hall India, 1998.
- Rao P.N., "*Manufacturing Technology*", Vol. I and Vol. II, Tata McGraw-Hill House, 2017.

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Course Outcomes (COs):

At the end of this course students will be able to:

Describe various safety norms and ability to use appropriate safety instrument in the workshop.

1. Describe various operations performed in different shops and select suitable hand tools and power tools.
2. Apply the knowledge to perform various operations to make simple job as an individual or in group.
3. Apply the knowledge to do the assembling or disassembling of simple products.