

Workshop Practice

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Course Code: WP01

- ❖ *This course is designed to introduce students to the fundamental of Workshop practice for the design of different products required in research and laboratory purpose.*
- ❖ *To provide machine experience in lathe , shaping and milling machine operations*
- ❖ *To provide machine experience in welding fabrication techniques.*
- ❖ *To teach bench work for fitting for different application.*

Unit 1 : Lathe Machine : Different lathe operation such as- Lathe operation, Plain turning Step turning

Unit II : Milling Machine : Different Milling operation such as- Cube machining, Step machining

Unit III : Shaping Machine : Different shaping operation such as- Cube machining, Step machining

Unit IV : Arc Welding : different welding joints such as- welding practice, Butt joint,

Unit V : Bench work for fittings : different bench work practices such as- Filing, Filing with hacksaw cutting, Square cutting. Step cutting

Outcome:

- ❖ Learned about the fundamental of mechanical operation such as (a) lathe (b) milling (c) shaping
- ❖ Understanding the practical knowledge on welding techniques
- ❖ Learned bench work practice for (a) filing (b) hacksaw cutting (c) square cutting etc.,
- ❖ Students would gain in workshop technology to designing and making new products that's unavailable in the market.

Reference Books:

1. Kumar: Trade turnership theory and practice (New Heights , New Delhi, 1996)
2. R. S. Khurmi, J. K. Gupta : Theory of Machines (Eurasia Publishers , New Delhi, 2013)
3. H. S. Bawa: Workshop Technology (Tata Mc Graw- Hill, 1995)
4. S. K. Hajree Chaudhary : Workshop technology (Media Promoters and Publishers Pvt. Ltd,1999)