

**GOVERNMENT POLYTECHNIC, NAGPUR**  
(An Autonomous Institute of Govt. of Maharashtra)



**CURRICULUM REVISION**  
**2011**

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**CURRICULUM DEVELOPMENT CELL**

**GOVERNMENT POLYTECHNIC, NAGPUR.**

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**COURSE CURRICULUM****PROGRAMME: DIPLOMA IN EC/EE****LEVEL NAME: III- BASIC TECHNOLOGY COURSES****COURSE CODE: WS 1302****COURSE TITLE: WORKSHOP PRACTICE****PREREQUISITE: NIL****TEACHING SCHEME: TH :00; TU :00; PR :04; TOTAL CREDITS: 04 (Hrs/Week)****(1 CREDIT = 1 CLOCK HR.)****EVALUATION SCHEME:**

MARKS	THEORY			TUTORIAL/PRACTICAL			TOTAL
	TERM EXAM	PROG TEST	TOTAL	PRACT EXAM	TERM WORK	ORAL EXAM	
MAX.	---	---	---	NIL	50@	NIL	50
MIN.	---	---	---	---	20	---	20

(# - External &amp; Internal Assessment ; @ - Internal Assessment only )

**TIME ALLOTTED FOR TERM EXAM : ---****TIME ALLOTTED FOR PROGRESSIVE TEST : ---**❖ **RATIONALE :**

The knowledge of different hand tools and basic processes such as Smithy, Carpentry Fitting, Filling, Welding and Plumbing is essential for technicians.

❖ **OBJECTIVES : The students will be able to -**

- Acquainted with various hand tools.
- Able to use these hand tools
- Familiar with various skills and techniques used in various trades.
- Able to use these techniques in manufacturing processes
- Able to develop the skills in manufacturing

❖ **SKILLS :**

- To develop attitude towards safety
- To develop ability to select appropriate tools
- To develop ability to handle tools.
- To develop ability to operate the machines.

**CONTENTS :****A. THEORY : NIL**

SR. NO.	CHAPTER	MARKS	HOURS
- NIL -			

**B. LIST OF PRACTICALS/LABORATORY EXPERIENCES/ASSIGNMENTS:**

S.No.	Title of Practical/Lab.Work/Assignments
1.	<b>MACHINE SHOP :</b> Two job's demonstration involving operations facing, plane turning, step turning, taper turning, drilling, boring, square treading (internal & external)
2.	<b>WELDING :</b>

	One composite job individually involving operations-angle cutting, pipe cutting, M.S. flat cutting, drilling and welding, soldering and brazing.
3.	Demonstration of tools, equipments and machineries used in fitting shop.
4.	Demonstration of tools, equipments and machineries used in smithy shop.
5.	Demonstration of tools, equipments and machineries used in carpentry shop .

❖ **ASSESSMENT OF LABORATORY EXPERIENCES/ASSIGNMENTS :**

Continuous assessment of Term Work .

(The student shall submit a journal and jobs on above work at the end of term.)

**SUGGESTED IMPLEMENTATION STRATEGIES :**

1. Demonstration
2. Models/ sample jobs

**SUGGESTED LEARNING RESOURCES :**

1. **PRINT :** Manuals/Journals.
2. **NON PRINT :** CDs / Charts / Models

**C. SPECIFICATION TABLE :**

Chapter No.	Job Area	Weightage (Marks)	Distribution of Marks			
			Cognitive	Psychomotor	Affective	Total
1.	Machine shop	20	3	14	3	20
2.	Welding shop	15	3	10	2	15
3.	Fitting	5	5	00	00	5
4.	Smithy	5	5	00	00	5
5.	Carpentry	5	5	00	00	5
<b>Total</b>		50	21	24	05	50

**D. REFERENCE & TEXT BOOKS:**

S.N.	Title	Author, Publisher, Edition and Year Of publication	ISBN Number
1.	A course in Workshop Technology	B.S.Raghuwanshi; Dhanpat Rai & sons, New Delhi ; 2006	
2.	Elements of Workshop Technology	Hajra; Choudhary; Media Promoters & Publishers Pvt.Ltd. Mumbai.	
3.	A Textbook of Manufacturing Process (Workshop Tech.)	Gupta J.K., R.S.Khurmi S.Chand & Co. New Delhi	81-219-3092-8
4.	Workshop practice manual	V.Kapoor; Dhanpat Rai & sons, New Delhi ; 2006	

**E. LIST OF EXPERTS & TEACHERS WHO CONTRIBUTED FOR THIS CURRICULUM:**

S.N.	Name	Designation	Institute / Industry
1.	Shri A.W.Wankhade	Work shop superintendent	Govt.Poly. Nagpur
2.	Shri.G.F.Potbhare	Principal	NIT Polytechnic, Nagpur

**Date:.....**

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**(Member Secretary PBOS)**

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**(Chairman PBOS)**