



VSPM Academy of Higher Education
Arvindbabu Deshmukh Mahavidyalaya Bharsingi
Tah. Narkhed Dist. Nagpur



Course Name- “Welding and Fabrication”

The course “Welding and Fabrication” was obtained under UGC scheme for the two years now college running the certificate course on self-finance basis from academic year 2017-18.

The objective of this certificate course is to **‘Develop skill and to become self-reliant and self-empowerment’**. Welding operations were basic and common to all departments in the workshop therefore we started this course in our college. In this year total **42** students were actively participated. We design syllabus for this course in our college and run from 1st week of February to 15th March (Duration-30 hrs). From B.A, B.Com. & B.Sc. students were interested and taken benefit of this course.

Welding is fabrication process that joins metals. This is often done by molten the materials and adding filler materials into it. Therefore safety is required so, we implements safety regulations and handling of instruments into students. We conducted Theory lectures as well as practical’s. Students learnt all basic information about this course and also learnt different types of joints (i.e. Butt Joint, Lap Joint, Corner Joint, Tee Joint & Edge Joint). We got positive response from students.

WELDING AND FABRICATION



VSPM Academy of Higher Education, Nagpur
Arvindbabu Deshmukh Mahavidyalaya, Bharsingi

Certificate Course
Welding and Fabrication

Syllabus

Sr. No.	Topic	Syllabus	Period (Hour)
1	Apply Safe Working practice	1. Importance of trade training. 2. Machinery used in the trade. 3. Introduction to safety equipment and their use. 4. Hack sawing, filing square to dimensions. 5. Safety precautions in Shielding Metal Arc Welding, and Oxy-Acetylene Welding and Cutting	5
2	Join MS sheet by gas welding in different positions.	1. Setting up of Arc welding machine & accessories and striking an arc. 2. Setting of oxy-acetylene welding equipment, lighting and setting of flame.	4
3	Join MS plates by SMAW in different positions.	1. Fusion run without and with filler rod on MS sheet 2mm thick in flat position 2. Edge joint on MS sheet 2mm thick in flat position without filler rod. 3. Marking and straight line cutting of MS plate 10 mm thick by gas	6
4	Perform straight, bevel & circular cutting on MS plate by oxyacetylene	1. Straight line beads on MS plate 10 mm thick in flat positions.	15

		<ol style="list-style-type: none">2. Weaved bead on MS plate 10mm thick in flat position3. Square butt joint on MS sheet 2 mm thick in flat position.4. Fillet 'T' Joint on MS plate 10 mm thick in flat position.5. Bevelling of MS plates 10mm thick by gas cutting.6. Open corner joint on MS 2 mm thick on flat position.7. Filler Lap joint on MS sheet 2 mm thick in flat position.8. Single 'V ' Butt joint on MS sheet. 12 mm thick in flat position9. Square Butt joint on MS sheet 2mm thick in Horizontal position.10. Straight line beads and multilayer practice on MS plate 10 mm thick in Horizontal position.11. Different type of pipe welding	
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Mr. More

Teacher of Course

Mr. S. R. Shingda

Coordinator of Course

Principal