

101908/CO922T CIVIL & MECHANICAL WORKSHOP

Course Contents and Lecture Schedule

Civil Workshop

No	Topic	No. of Lectures
1	Introduction to various equipments used in Civil Engineering Workshop	2
2	Setting out of a building using measuring tape only	2
3	Introduction to Brick Masonry	2
4	Brick Masonry 1 and 1 and half brick thick	2
5	Introduction to Levelling	2
6	Levelling- Fly levelling Height of instrument method	2
7	Compare the Area Calculated using Tape and Digital Distance Measuring Device	2
8	Computation of Number of Bricks and Blocks	2
9	Transfer of level- Water level method	2
10	Introduction to simple plumbing and sanitary fittings	2
	Mechanical Workshop	
1	INTRODUCTION	
1.1	Workshop practice, shop floor precautions, ethics and First Aid knowledge. Studies of mechanical tools, components and their applications: (a) Tools: screw drivers, spanners, Allen keys, cutting pliers etc.	2

	and accessories (b) bearings, seals, O-rings, circlips, keys etc.	
2	CARPENTRY	
2.1	Understanding of carpentry tools and making minimum one model	2
3	FOUNDRY	
3.1	Understanding of foundry tools and making minimum one model	2
4	SHEET METAL	
4.1	Understanding of sheet metal working tools and making minimum one model	2
5	FITTING	
5.1	Understanding of fitting tools and making minimum one model	2
6	PLUMBING	
6.1	Understanding of pipe joints and plumbing tools and making minimum one model	2
7	SMITHY	
7.1	Understanding of smithy tools and making minimum one model	2
8	WELDING	3
8.1	Understanding of welding equipment and making minimum one model	
9	ASSEMBLY	2
9.1	Demonstration of assembly and disassembling of multiple parts	4

	components	
10	MACHINES	2
10.1	Demonstration of various machines	
11	MODERN MANUFACTURING METHODS	3
11.1	Demonstrations of: power tools, CNC Machine tools, 3D printing, Glass cutting	3