

Trades Details Summary

Trade Name	Description	Duration (Days)
Machinist	Theory and practical session to give technical training in Machinist trade	18

Theory (Machinist)

Topic	Keylearning Outcomes	Equipment Required	Duration
Lathe Machine	<ul style="list-style-type: none"> Introduction of Lathe Machine Parts and their purpose Chucks-Type and their advantages & disadvantages Feed Mechanism Application of Lathe Machine 	(Presentations, Trainer Guide), Lathe machine, MS Round bar, cutting tools, measuring tools, Personal Protective Equipment (PPEs)*.	2:0
Vertical Milling Machine	<ul style="list-style-type: none"> Introduction of Vertical Milling Machine Parts and their purpose Importance of Milling Machine Application of Vertical Milling Machine 	(Presentations, Trainer Guide)	2:0
Registration of participants	<ul style="list-style-type: none"> Covid Declaration Participants Profile Describe the role of a Machine technician 	White Board	2:0
Machine safety & Knowledge about PPEs Theory Duration	<ul style="list-style-type: none"> What is Safety Awareness about General Safety Machine Safety Use of PPEs Advantages of Safety Safety signs for Danger, Warning and Cautions. Do's & Don'ts 	(Presentations, Trainer Guide), Personal Protective Equipment (PPEs)*.	2:0
Introduction of Machining process	<ul style="list-style-type: none"> Definition of Machine Explain different types of Machining processes and associated tools & equipments Importance of Machining Uses of Machining 	(Presentations, Trainer Guide), Personal Protective Equipment (PPEs)*.	2:0
Measuring units	<ul style="list-style-type: none"> Introduction – Measurement M.K.S. units C.G.S. units F.P.S. units S.I. units Conversion of units 	(Presentations, Trainer Guide), Measuring Instruments (i.e. steel rule, measuring tape etc.) Personal Protective Equipment (PPEs)*.	2:0
Basic Concept of Engineering Drawing	<ul style="list-style-type: none"> Types of lines and their Uses Basic Concept of Quadrants and their sign What is Projection Types of Projection. Drawing Symbol and their meaning 	(Presentations, Trainer Guide), Paper, Pencil, scale & eraser, Mini drafter drawing instruments, Personal Protective Equipment (PPEs)*.	2:0
Basic measuring tools	<ul style="list-style-type: none"> Steel Rule. Vernier Caliper (i) Parts and purpose (ii) Least Count (iii) How to read & take Measurement. (iv) Importance of Accuracy and Precision Micrometer (i) Parts and purpose (ii) Least Count (iii) How to read & take Measurement. (iv) Importance of Accuracy and Precision 	(Presentations, Trainer Guide), Steel Rule. Vernier Caliper, Micrometer, Personal Protective Equipment (PPEs)*.	2:0
Drilling Machine	<ul style="list-style-type: none"> Introduction. Working Principle. How to make a hole in work piece. (i) Selection of drill. (ii) Use of Drill Chuck and Chuck Key. (iii) Use of Taper Sleeve & Socket. (iv)Use of drift. 	(Presentations, Trainer Guide), Tri-square, Steel Rule, Scriber, Punch, Hammer, Drill machine, Drill bit, MS plate, Personal Protective Equipment (PPEs)*.	2:0
Doubt Clearing	<ul style="list-style-type: none"> Feed Back Group discussion 	Presentations, White Board	2:0
Valedictory	<ul style="list-style-type: none"> Work Ethics Personal Financial Planning Health 	Presentations, White Board	2:0
First Aid	<ul style="list-style-type: none"> Electrocution Cut Bleeding Faint Bandage Resuscitation Ambulance 	Audio-Video	4:0
Material Handling	<ul style="list-style-type: none"> Movement of Raw Material Movement of Finished Material Waste Segregation Cleanliness Stacking 	Audio-Video	3:0

Effective Communication	• Subordinate • Peers • Superiors • Customers	Audio-Video	5:0
Orientation Programme & Introduction about Entrepreneurship	• Entrepreneur, Entrepreneurship and Enterprise • Scheme & Types of Entrepreneurship • Importance of Entrepreneurship • Entrepreneurship Opportunities & Challenges • Startup Business • Cash Flow * Incubation Centre like DIC & IIT (BHU)	PPT	2:0
Financial Management	• Financial Management • Resources / Fund availability by Bank * Loan Scheme like Mudra Loan	Power Point Presentations, White Board	2:0

Practical (Machinist)

Topic	Keylearning Outcomes	Equipment Required	Duration
Practical	• Use of Marking Tools-Punch, Tri- square • Marking of out lines for desired dimension. • Marking by Punch for drilling holes. • Drilling holes.	Tri-square, Steel Rule, Scriber, Punch, Hammer, Drill machine, Drill bit, MS plate, Personal Protective Equipment (PPEs)*	10:0
Practical	Different types of Machining processes and associated tools & equipments.	Different types of machines ,i.e.-lathe, drill, mill, etc.	5:0
Practical	• Measuring different types of components & conversion in different units.	Measuring Instruments (i.e. steel rule, measuring tape etc.)	5:0
Practical	• Drawing of "T" shape work piece and showing its dimensions in Orthographic Projection.	Paper, Pencil, scale & eraser, Mini drafter drawing instruments	5:0
Practical	• Setting, Measuring and taking reading by Vernier Caliper & Micrometer.	Steel Rule. Vernier Caliper, Micrometer	5:0
Practical	• Turning, step turning, facing etc.	Lathe machine, MS Round bar, cutting tools, measuring tools, Personal Protective Equipment (PPEs)*.	20:0
Practical	• Chamfering / Milling of MS plate at desired degree on Vertical Milling	Milling machine, MS plate, milling cutters, Measuring instruments.etc., Personal Protective Equipment (PPEs)*.	12:0