

Trades Details Summary

Trade Name	Description	Duration (Days)
Track laying	To give technical training in Track Laying	18

Theory (Track laying)

Topic	Keylearning Outcomes	Equipment Required	Duration
Registration of Participants	Self-declaration of covid-19 measures, guidelines, Participant's profile	White Board	2:0
Equipment safety & knowledge about PPEs	What is safety. Awareness about general safety, equipment safety, Use of PPEs, Hand gloves, shoes, protective jacket, safety Goggles, Apron, Earplugs, Advantages of safety, Do's & Don'ts	Presentations, Trainer's Guide	2:0
Introduction to Rails & fish plates	Rails-Function of rails, Different type of rail section, grade, UTS & service life, Rolling marks, colour coding of rails, Instruction for handling of rails. Different types of fish-plates 610mm fishplate, 1m long fish plate, Combination fish-plates, Skimmed fish-plates, Different types of fish-bolts, anti-sabotage fish-bolts, Chamfering of bolt holes, Glued joints (in situ/ prefab), ordinary insulated joints (BJ).	Presentations, Trainer's Guide	2:0
Introduction to Concrete sleepers	Functions of sleepers, various types of Sleepers including composite sleepers. Concrete sleepers, Mono-block PSC Sleeper, Special sleepers for L-xings, turnout, SEJ, bridges approach, slack gauge sleepers for curves (more than 4 degree), special sleepers for sharp curves (more than 8 degree), wider sleeper. Sleeper density on different routes. Precautions for handling of PSC sleepers during unloading and laying	Presentations, Trainer's Guide	3:0
Introduction to LWR theory	Concept of LWR, SEJ, Different types of SEJ and its laying. permitted locations for laying, Track Structure for LWR,	Presentations, Trainer's Guide	2:0
Introduction to different types of fittings	Various types of ERC, Rubber pads, Liners etc	Presentations, Trainer's Guide	1:0
Introduction to Ballast	Ballast -Functions of Ballast. Ballast sections for straight and curves on single/double lines, for BG/MG/NG with fish plated track, SWR & LWR	Presentations, Trainer's Guide	1:0
Formation	Functions of formation, Formation profile for bank and cutting including side and catch water drains, width of formation, slope in formation.	Presentations, Trainer's Guide	1:0
Method of laying of LWR Track	Method of laying of LWR Track ,Manual Method, Mechanised Method-PQRS, TRT etc	Presentations, Trainer's Guide	2:0
Assembly and laying of Turn out	Understanding of Turn outs, Method of laying of Fan shaped Turn out	Presentations, Trainer's Guide	2:0
Welding of Rails	AT welding, Flush butt welding	Presentations, Trainer's Guide	1:0
Track structure on Bridge	Track structure on girder bridges, ballasted deck, provision of guard rails etc	Presentations, Trainer's Guide	1:0
Doubt clearing	Feed Back, Group discussion	Presentations, white board	2:0
Valedictory	Work Ethics, personal financial Planning, Health	Presentations, White Board	2:0
Effective Communication	Subordinates, Peers, Superiors, Customers.	Audio-Video	5:0
First Aid	Electrocution, cut, Bleeding, Faint, Bandage, Resuscitation, ambulance	Audio-Video	4:0
Material handling	Introduction to method of Rail unloading by End Unloading Rake (EUR) and related precautions movement of new materials at site, segregation of released material, Movement of released material, Stacking.	Audio-Video	3:0
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)	Presentations, Trainer's Guide	2:0

Financial Management	• Financial Management • Resources / Fund availability by Bank • Loan Scheme like Mudra Loan	Presentations, Trainer's Guide	2:0
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Practical (Track laying)

Topic	Keylearning Outcomes	Equipment Required	Duration
Track structure on bridges	Site visits to understand track structure on steel girder bridge, ballast deck concrete bridge.	NA	12:0
Model room study	Understanding and visualisation of different P.way fittings and equipment, track structure assembly, steel sleepers, hydraulic rail tensor, speed restriction boards, different type of rail closers.	Model room	12:0
SEJ Measurements	Site visits to understand working of SEJ and its measurements.	NA	12:0
Turn out assembly	Site visits to understand different types of Turn outs, sleeper spacing, fixing of fittings, different parts of Turn outs.	NA	12:0
LWR Track	Site visits to understand LWR tracks, ballast profile, maintenance activities etc.	NA	12:0