

Trades Details Summary

Trade Name	Description	Duration (Days)
Bar Bending	To give technical training in Bar Bending	18

Theory (Bar Bending)

Topic	Key Learning Outcomes	Equipment Required	Duration
Valedictory	Work ethics, Personal financial planning, Health	White Board, PPT	1:0
Registration of participants	COVID Declaration Participants Profile Describe the role of a BE bender	White board	2:0
Orientation Programme & Introduction about Entrepreneurs hip	Describe the role and responsibilities of a Bar bender Level Basic Describe safety requirements for equipment, auto components and aggregates, Describe safety. Health policies and regulations at the workplace. Entrepreneur, Entrepreneurship and Enterprise Types of Entrepreneurship Importance of Entrepreneurship Entrepreneurship Opportunities & Challenges Startup Business -Cash Flow	White Board	2:0
Safety & Knowledge about PPEs	What is Safety Awareness about General Safety Use of PPEs, Hand gloves, Safety gaggles, Apron, Earplugs, Advantages of safety, Dos and Don'ts. - Electrocutation, cut, Bleeding, Faint, bandage, Resuscitation, Ambulance	White Board	2:0
Introduction to Bar Bending	Basic knowledge of Unit & measurement. Basic knowledge o(arithmetic calculation.	White Board	3:0
Introduction to Bar Bending	Role of an Assistant Bar Bender & Fixer. Job opportunities for a Assistant Bar Bender & Fixer	White Board	3:0
Material Handling and Storing (D/L)	Loading, unloading & shifting of reinforcement material in a proper sequence as per methodology. Correct procedure for storage & maintenance of reinforcement steel.	White Board	3:0
Material Handling and Storing (D/L)	Staking of rods as per different diameter of bars & length. Understand identify and demonstrate the use of hooks, rings and shackles	White Board	3:0
Bar Bending Schedule & Drawing (P/L)	Basics of bar bending schedule Reading and understanding relevant specification given in the drawing Types of steel (TOR, MILD steel). Difference between clear cover & effective cover. Importance of spacing and diameter of reinforcement	White Board	3:0
Bar Bending Schedule & Drawing (P/L)	Identification & importance of main & secondary bar Understanding and reading structural and steel drawing	White Board	3:0
Identification and use of different type of stirrups and cranked shear bars (D/P/L)	Identification of different types of stirrups and cranks/ shear bars. Use of cranks and stirrups in RCC works and method of their preparation. Selection of tools. pin plate for bending of stirrups	White Board,	3:0
Identification and use of different type of stirrups 'and crank/ shear bars (D/P/L)	Use of crank/shear bars. Calculation of cuhing length for the stirrups. Tolerance for stirrups & shear/crank bars - Demonstration of making different types of stirrups	White Board	3:0
Fabricate reinforcement in lintel, slab and projection (D/P/L)	Method of marking and cutting reinforcing bars manually and by rod cutting machine	White Board,	3:0
Fabricate reinforcement in lintel, slab and projections (D/P/L)	Calculation of cutting length from the sketches	White Board	3:0
Fabricate reinforcement in lintel, slab and projections (D/P/L)	Sequence of fabrication for slab and Intel reinforcement. Tolerance for lintel .Tolerance lore slab Use o(cover blocks in RCC works. Demonstration of fabrication of Lintel	White Board	3:0
Fabricate reinforcement in lintel, slab and projections (D/P/L)	Demonstration of fabricating slab reinforcement	White Board	3:0

Fabricate beam reinforcement with and without shear bar (D/P/L)	Introduction & importance of RCC beam • Importance of stirrups in beam reinforcement • Different types of ties used for tying of beam reinforcement	White Board	3:0
F-abdicate beam reinforcement with and without shear bar (D/P/L)	Calculation of cutting length from the sketches	White Board	3:0
Fabricate beam reinforcement with and without shear bar (D/P/L)	Marking, alternate placement & tying of stirrups. Importance of lapping length, development length and their position in their beam. Sequence of fabrication for beam reinforcement. Tolerance for cutting, bending, spacing & tying of beams	White Board, PPT	3:0
Fabricate beam reinforcement with and without shear bar (O/P/L)	Demonstration of fabrication of beam	White Board, PPT	3:0
Fabricate reinforcement cage of column & base in situ position while incorporating crank bars (D/P/L)	Introduction & Importance of RCC column & footing. Difference between long column, short column and pedestal. Different types of ties used for tying of column, footing reinforcement	White Board, PPT	3:0
Fabricate reinforcement cage of column & base in situ position while incorporating .crank bars (D/P/	Calculation of cutting length from the sketches	White Board, PPT	3:0
Fabricate reinforcement cage of column & base in situ position while incorporating crank bars (D/P/L)	Marking, alternate placement, tying of stirrups for column. Importance of lapping length, development length and their position in their beam. Sequence of fabrication for column reinforcement. Tolerance for cutting, bending, spacing & tying of column	White Board, PPT	3:0
Fabricate reinforcement cage of column & base in situ position while incorporating crank bars (DSP/L)	Demonstration of Fabrication of Column in situ. Demonstration of fabrication of footing in situ	White Board, PPT	3:0
Elective Communication	Subordinate, peers, superiors, customers	White Board, PPT	3:0
Concreting and Framework	Introduction and importance of framework	White Board, PPT	3:0
Concreting and Framework	Laying, vibration and testing of concrete	White Board, PPT	3:0
Doubt clearing	Feedback, Group discussion	White Board, PPT	3:0
Fabricate reinforcement in lintel. slab and projections (D/P/L)	Main and distribution of reinforcement bar. Various types used for tying reinforcement in structural member. Safety precaution with using lying machine	White Board, PPT	3:0

Practical (Bar Bending)

Topic	Keylearning Outcomes	Equipment Required	Duration
Practical (Rod bending)	Fabricate reinforcement in lintel, slab and projections	Bar bending bench with pins and equipment Reinforcement bars	6:0
Practical (Rod bending)	Fabricate beam reinforcement with and without shear bar	Bar bending bench with pins and equipment Reinforcement bars	6:0
Practical (Rod bending)	Fabricate reinforcement cage of column & base in situ position while incorporating crank bars	Bar bending bench with pins and equipment Reinforcement bars	6:0