

## These Project Reports are available in IRICEN Library

Contact us:- [library@iricen.gov.in](mailto:library@iricen.gov.in)

S.N.	Course No.	Course Name	Project Name	Topic	Track/Bridge/works/misc
1	12209	Sr. Professional (P-Way)	Case Study of Derailment of Goods Train & Restoration in Howrah Division on 13.12.2011	Accident case studies	Track
2	17101	Integrated	Case Study on Typical Accident of Tr No 16594 Nanded Exp.	Accident case studies	misc
3	14202	SAG Referresher	How to Avoid & Win Arbitration	Arbitration	Misc
4	16103	Integrated	Comparision between types of ballastless tracks	Ballastless track	Track
5	17101	Integrated	Laying & Maintenance of Ballastless Track in Mass Rapid Transit System	Ballastless track	Track
6	18101	Integrated	Restoration of washout approach of Br No. 133 in KIR Divn of NF Rly	Breaches restoration	Track
7	18101	Integrated	Analysis of Breaches in W Rly, ADI division between WDHR MALB-INDR section in July 2017	Breaches restoration	Track
8	17101	Integrated	Reconstruction of Cracked Pier Under Running Line	Bridge Construction	Bridge
9	17103	Integrated	Elimination of Bridges in New Line Project	Bridge Construction	Bridge
10	16202	Sr. Professional (Bridge)	Challenges in Rehabilitation/ Replacement of Bridges	Bridge Construction	Bridge
11	17202	Sr. Professional (Bridge)	Case Study of Construction of 825 m Viaduct bridge on new line between Belapur – seawoodUnan Project	Bridge Construction	Bridge

12	16102	Integrated	Rebuilding of Bridge	Bridge Construction	Bridge
13	18101	Integrated	Strengthening of Masonry Arch Bridges by RCC jacketting	Bridge Construction	Bridge
14	17103	Integrated	Under Water Inspection	Bridge inspection & maintenance	Bridge
15	15101	Integrated	Working of Mobile Bridge Inspection Unit	Bridge inspection & maintenance	Bridges
16	16201	Sr.Professional	Automatic Flood & Water Level Monitoring System at Rly Bridges	Bridge inspection & maintenance	Misc
17	16101	Integrated	Directed Building Maintenance	Building Maintenance	Works
18	14201	SAG Referesher	Safety in Building Construction	Building Maintenance	Works
19	824	Sr.Prof (Bridge & Gen)	Colony Maintenance A Case Study of Pipariya Station of Jabalpur Division, West Central Rly.	Colony Maintenance	Works
20	13203	SAG Refresher	Redevelopment of Railway Colonies through commercial development of Railway Lands	Colony Maintenance	Works
21	17102	Integrated	Alteration/Deletions and Suggestions in existing paras of IRPWM.	Compilation of instructions	Track
22	18202	Sr.Professional (P-Way)	IRPWM - Study of some manual provisions, their practical implementation & suggestions for modifications	Compilation of instructions	Track
23	16101	Integrated	Compendium of Instructions on Work Contract Matter	Compilation of instructions	Works
24	16102	Integrated	Tendering Process On Indian Railways	Compilation of instructions	Works
25	17202	Sr.Professional (Bridge)	Excel sheet for Concrete mix design	Concrete	Works

26	16102	Integrated	Excel sheet for Concrete mix design	Concrete	Works
27	17101	Integrated	Provision of Vacuum Dewatered Concrete Flooring In Uncovered Areas	Concrete	Works
28	17102	Integrated	Steel Fibre Reinforced Concrete	Concrete	Works
29	16103	Integrated	Manufacturing of high grade concrete sleepers in concrete sleeper plants and some corrective action need to be taken in present system	Concrete sleeper	Track
30	17103	Integrated	Loading & Unloading of Concrete Sleepers	Concrete sleeper	Track
31	16203	Sr.Professional (P-Way)	Quality Control in Prestressed Concrete Sleeper	Concrete sleeper	Track
32	17101	Integrated	Construction of Important Bridges Across Cauveri river	Construction of important bridges	Bridge
33	14202	SAG Refereshesher	Construction of Important Bridges Across Ganga River At Kachhala in Kasganj-Bareilly Section of NER - Rejection of Girders and Accident at Site	Construction of important bridges	Bridge
34	822	Sr.Prof (Bridge & Gen)	Case study on casting of PSC Box Girders in Br No 758/1 @ km 758/3-5 between Barsitakli & Shivnishivpuri Stations in Purna-Akola Section of S C Rly	Construction of PSC Bridges	Bridge
35	16102	Integrated	Monitoring of Prestress Losses In Bridge Girder	Construction of PSC Bridges	Bridge
36	16103	Integrated	Construction of Bridge No 184 on Londha-Miraj section of SW Rly	Construction of PSC Bridges	Bridge
37	16104	Integrated	Launching of 105 Ft. PSC Girder	Construction of PSC Bridges	Bridge
38	14201	SAG Refereshesher	Construction of Project Rail Wheel Plant	Construction of rail wheel plant project	Works
39	16201	Sr.Professional	Use of Financial Management Tools in Contract Management	Contract Management	Misc

40	721	Sr. Professional (P-Way)	Design of Curves for High Speed Routes	Design of curves	Track
41	17102	Integrated	Safety and Quality Aspects in Railway Doubling Projects	Doubling projects	Track
42	17103	Integrated	Pollution Control Measures in Good Shed	Environmental issue	Misc
43	16201	Sr. Professional	Environmental Aspect in Railway Construction Projects	Environmental issue	Works
44	17202	Sr. Professional (Bridge)	Engineering Procurement Construction	EPC	Works
45	16103	Integrated	Formation Treatment by Geo- Grid & Geo-Textile with Ballast Cleaning Machine	Formation works	Track
46	16104	Integrated	Formation Treatment – BCM Working	Formation works	Track
47	17102	Integrated	Quality Control in Formation Embankment	Formation works	Track
48	16201	Sr. Professional	Formation Work With Blanketing Material for New Railway Line (BG) between DO-GGC under the jurisdiction of NWR	Formation works	Track
49	16201	Sr. Professional	Formation Treatment by Moorum Blanketing (Track Dismantling Method)	Formation works	Track
50	16201	Sr. Professional	Introduction of Geotextile In Lieu of Conventional Blanketing Material In GC & New Line In SPJ Division of ECR	Formation works	Track
51	16203	Sr. Professional (P-Way)	Formation Rehabilitation - A Case Study In Gauchhari-Pasraha Stns, Sonpur Divn, ECR	Formation works	Track
52	16203	Sr. Professional (P-Way)	Formation Work With Blanketing Material, Specifications & RDSO Guide Lines for New B.G. Railway Line & A Case Study of Bidar-Gulbarga New BG Line of SWR	Formation works	Track
53	17203	Sr. Professional (P-Way)	Mix Design of Blanketting Material for Formation	Formation works	Track

54	16101	Integrated	Earthwork in North Approach of Ganga Rail cum Road Bridge	Formation works	Works
55	16201	Sr.Professional	Quality Control Tests & Acceptance Standards Compiled from IS Codes	Formation works	Works
56	15101	Integrated	Ground Improvement of Soft Soil/Marine Clay by Using PVD Band Technique	Formation works	Works
57	16104	Integrated	Ground Improvement With Pre-fabricated Vertical Drain	Formation works	Works
58	16104	Integrated	Features of BLC Wagon and Problems During Its Operation – Case Study	Freight stock	Misc
59	17202	Sr.Professional (Bridge)	Retention/rehabilitation of Arch bridges in GC/Doubling projects	Gauge Conversion	Bridge
60	823	Sr.Prof (P-Way)	Gauge Conversion Work	Gauge Conversion	Track
61	10202	SAG Refresher	Use of GPS in the Gauge Conversion between Mudkhed & Kinwat of S. C. Rly	Gauge Conversion	Track
62	16103	Integrated	Lumding to Silchrr section of Badarpur-Silchar Gauge Conversion Project	Gauge Conversion	Track
63	16201	Sr.Professional	Gauge Conversion Project of Barhni-Gonda Section of NE Rly, Gorakhpur	Gauge Conversion	Track
64	17203	Sr.Professional (P-Way)	A Case Study of Pandharpur-Miraj section of Latur-KWV-Pandharpur-Miraj Gauge Conversion on CR	Gauge Conversion	Track
65	525	Sr. Professional (P-Way)	Problems & Solutions in Handling & Transportation of Long Rails	Handling of Rails	Track
66	17202	Sr.Professional (Bridge)	Excel sheet for design of linear water way and Scour depth of bridge.	Hydrological investigation	Bridge
67	15101	Integrated	Design of Water Way of Bridge	Hydrological investigation	Bridges

68	15101	Integrated	Design of Water Way of Bridge	Hydrological investigation	Bridges
69	525	Sr. Professional (P-Way)	Innovative Track Systems Under Development on Foreign Railways	Innovative Track System	Track
70	824	Sr.Prof (Bridge & Gen)	Health Monitoring of Bridges by Sensors	Instrumentation of bridges	Bridge
71	15202	Sr. Professional (Bridges & G1)	Case Study of Commercial Development of Land at Vijaywada (AP)	Land	Misc
72	18101	Integrated	Treaspas control measures at suburban stations of Mumbai	Land	Misc
73	14201	SAG Refereshar	Land Acquisition, Social & Environmental Issues In Infrastructure Projects	land	Works
74	17203	Sr.Professional (P-Way)	Laying & Maintenance of Long Welded Rails on IR	LWR	Track
75	525	Sr. Professional (P-Way)	LWR on Ballasted Deck Bridges - UIC Approach	LWR on bridges	Track
76	17102	Integrated	Through Weld Renewal (TWR) By Mobile Flash Butt Welding Process	Mobile Flash Butt Welding	Track
77	16104	Integrated	Pile Foundation – Execution Problems and Solutions	Pile Foundation	Bridge
78	16104	Integrated	Protection Works and Design Aspects	Protection works	Bridge
79	16102	Integrated	Rail Grinding Machine & Its Working	Rail Grinding	Track
80	721	Sr. Professional (P-Way)	Improvements in Rail Steel Metallurgy for 32.5T Axle Load	Rail steel metallurgy	Track
81	9208	SAG Refresher	Study & analysis of fractures and correlation with other factors on Bilaspur Division, SEC Rly	Rail weld fractures	Track

82	525	Sr. Professional (P-Way)	Development of Rolling Contact Failure in Rails & Remedial Measures	Rail weld fractures	Track
83	525	Sr. Professional (P-Way)	Development of Rolling Contact Failure in Rails & Remedial Measures	Rail weld fractures	Track
84	9209	SAG Refereshher	Study & Analysis of Rail/Weld Failures of Gorakhpur Gonda Section of Lucknow Division of NE Rly	Rail weld fractures	Track
85	16101	Integrated	Corrosion of Rails on Liners Seat In Night Soil Affected Areas	Rail weld fractures	Track
86	16104	Integrated	Removal of SKV Weld Due to Age of Weld Through Removal With Flash Butt Welding Using Mobile Flash Butt Plant Including Through Fitting Removal	Rail weld fractures	Track
87	17103	Integrated	Analysis of USFD/RF/WF data on NR/SCR/ECOR from TMS	Rail weld fractures	Track
88	16201	Sr.Professional	Prevention of Rail Weld Failures	Rail weld fractures	Track
89	16201	Sr.Professional	Analysis of Rail Weld Failure	Rail weld fractures	Track
90	16203	Sr.Professional (P-Way)	Controlling of Rail/Weld Failure	Rail weld fractures	Track
91	18101	Integrated	Reduction of Rail Weld failures on Indian Rlys	Rail Weld fractures	Track
92	16201	Sr.Professional	Manufacturing of Alumino Thermic Portions & Latest Research & Development in the Thermite Rail Welding	Rail welding	Track
93	16203	Sr.Professional (P-Way)	TWR with Flash Butt Weld	Rail welding	Track
94	16102	Integrated	Rain Water Harvesting of ZRTI C.Rly, BSL	Rain water Harvesting	Works
95	17103	Integrated	Rain Water Harvesting	Rain water Harvesting	Works

96	17103	Integrated	Rain Water Harvesting of SP Marg Colony, NDLS	Rain water Harvesting	Works
97	15101	Integrated	Restoration of 24.4 M Girder of Br No. 200 on K-K Line of VSKP Division of East-Coast Rly	Restoration of breaches	Bridges
98	17101	Integrated	Breach on Sharda Canal affecting Railway Bridge on Lucknow-Raebareli-Varanasi Route	Restoration of breaches	misc
99	17103	Integrated	Restoration of Washout Track	Restoration of breaches	Track
100	16103	Integrated	Project on Moradabad Rly Stn	Rly station	Works
101	16103	Integrated	Tambaram Development as Coaching Terminal on BG	Rly station	Works
102	12204	SAG Refresher	Problems faced in Construction of ROB in place of level crossing No. 244 in N.E. Rly	ROB	Bridge
103	12204	SAG Refresher	Case study of Prestressed Concrete Construction of Road Over Bridges	ROB	Bridge
104	16103	Integrated	Construction of Road Over Bridge in liue of L.C. Gate No. 60 between Solapur-Hotgi Stn.	ROB	Bridge
105	16104	Integrated	Rebuilding of Over Aged ROB/FOB Over Multiple Busy Lines Within Corridor Blocks Without Block (CSTM-DR Section)	ROB	Bridge
106	17102	Integrated	Cable Stayed Bridges ROB	ROB	Bridge
107	14201	SAG Referesher	Method of Construction & Problems Faced in Construction of ROB	ROB	Bridge



108	13201	SAG Refresher	Construction of ROB with Composite Girder & Comparison With Conventional PSC Girder	ROB	Works
109	16101	Integrated	Construction of Limited Height Subway in Lieu of Manned Traffic Level Crossing Gate No 13 in Modlimb Yard bet Modlimb-Pandharpur of SUR Divn, C.Rly	RUB	Bridge
110	16201	Sr. Professional	Methods Construction of Limited Height Sub ways- Problems Associated	RUB	Bridge
111	16202	Sr. Professional (Bridge)	A Case Study of RUB Construction at LC No. 90 in Phulera-Rewari Section	RUB	Bridge
112	18101	Integrated	Construction of Limited Height Subway by Cut & Cover Method	RUB	Bridge
113	17103	Integrated	Construction of LHS in Yard Below HFL	RUB	Works
114	525	Sr. Professional (P-Way)	Implications & Solutions for Running of 25T Axle Load	Running of 25T/32.5 axle load	Track
115	525	Sr. Professional (P-Way)	Implications & Solutions for 30T Axle Load on Dedicated Route of Indian Rlys	Running of 25T/32.5 axle load	Track
116	721	Sr. Professional (P-Way)	Ballast Specification for High Axle Load (32.5 Tonnes) and High Speed (>250 KMPH)	Running of 25T/32.5 axle load	Track
117	15101	Integrated	Problems in Maintainance of Small Track Machines, Tools and Improvement	Small track machines	Track
118	16101	Integrated	Fabrication of Steel Bridge Girders and Quality Control	Steel girder fabrication	Bridge
119	16103	Integrated	Fabrication of 61.00 m Span Open Web Welded Girders in Bridge W/shop, Gorakhpur	Steel girder fabrication	Bridge

120	16104	Integrated	Replacement of Road Stringers and Cross Girder After Cutting of Road RCC Deck and Casting Casting It In Two Tier Road/Rail Bridge at Rajendrapur/MKA In Running	Steel girder fabrication	Bridge
121	17102	Integrated	Fabrication & Trial Assembly of Open Web Steel Girders	Steel girder fabrication	Bridge
122	17102	Integrated	Metallising of Steel Girders	Steel girder fabrication	Bridge
123	16202	Sr.Professional (Bridge)	Replacement of Dina Hanger of 3rd Godavari Bridge No. 248 at RJY	Steel girder fabrication	Bridge
124	16202	Sr.Professional (Bridge)	Case Study of Regirdering of 150 feet Under Slung Open Web Girder by 150 Feet Through Type Open Web Girder	Steel girder fabrication	Bridge
125	14201	SAG Referesher	Provision Regarding Deflection/ Camber In Various National & International Codes for Rail & Road Bridges	Steel girder fabrication	Misc
126	17101	Integrated	Replacement of Corroded Rail Bearerof Ullahas Bridge 51/1 Main Route Diva-Vasai on C.R.	Steel girder fabrication	Track
127	17203	Sr.Professional (P-Way)	Launching of Open Web Girder of Span 1X76.2 m for Bridge No 21-C Aadityapur-Gamharia section of Howrah-Mumabi Main Line	Steel girder fabrication	Track
128	17101	Integrated	Selection of New Alignment in Final Location Survey From Byrnihat New Line Project	Survey for new alignment	Track
129	17101	Integrated	Misamari (Bhalupong) - Tenga - Tawang - Strategic Line - Final Location Survey - Terms of Reference	Survey for new alignment	Track
130	16103	Integrated	Construction of New 3rd BG Line From Rajkharswan Station to Pandrasali Stn of Rajkharswan-Dangoaposi in Proposed 3rd Line Project of Chakradharpur Divn of SE	Third line construction project	Track
131	16201	Sr.Professional	Implementation of Track Management System in NCR	TMS	Track

132	17102	Integrated	Relaying Track by TLE	Track construction	Track
133	16201	Sr.Professional	Modification to Camping Coaches	Track machines	Misc
134	16201	Sr.Professional	Innovations + Modifications = Indianization of Track Machines	Track machines	Track
135	16101	Integrated	Deep screening of Yard main line by BCM throwing muck beyond loop line by special arrangements	Track maintenance	Track
136	17101	Integrated	Rubberised Level Crossing System on Indian Rlys	Track Maintenance	Track
137	16203	Sr.Professional (P-Way)	Lateral Resistance of Track	Track maintenance	Track
138	16203	Sr.Professional (P-Way)	Strategy to be Taken For Improving TGI	Track maintenance	Track
139	15101	Integrated	Study of Tamping Cycle	Track maintenance	track
140	17203	Sr.Professional (P-Way)	Track Maintenance Practices	Track maintenance	Track
141	18202	Sr.Professional (P-Way)	Composite Railway Sleepers - Status & Development	Track maintenance	Track
142	18202	Sr.Professional (P-Way)	Corrosion of Rail liner seat & protection using latex paint and using HDPE Caps	Track maintenance	Track
143	18202	Sr.Professional (P-Way)	Precautions in Insertion of PSC Turnout	Track maintenance	Track
144	18202	Sr.Professional (P-Way)	Thick Web Switches Laying & Maintenance Issues	Track maintenance	Track
145	18202	Sr.Professional (P-Way)	Impact & Constraints of use of WILD (Wheel Impact Load Detector) in Track Maintenance	Track maintenance	Track

146	12209	Sr. Professional (P-Way)	Interchanging Worn Out Gauge Face of Rail in LWR on Curved Track in Ghat Section	Track maintenance in Ghat section	Track
147	17101	Integrated	Very High Frequency (VHF) based approaching train warning system "RAKSHAK"	Train warning systems	Misc
148	824	Sr.Prof (Bridge & Gen)	Strengthening of Cutting between Limkheda-Mangalmahudi & Tunnel at Panchapiplia in RTM-Godhra section of W.Rly	Tunneling	Track
149	16202	Sr.Professional (Bridge)	Challenges Faced in Construction of Tunnel No. 7 from Face 2 (Silchar End) In Extremely Soft Ground Conditions Under Lumding- Silchar Gauge Conversion Project, NF Rly	Tunneling	Track
150	823	SAG Refresher	Use of NATM (New Austrian Tunneling Method) in Tunneling	Tunneling	Works
151	16102	Integrated	Execution of Railway Tunneling Work	Tunneling	Works
152	17102	Integrated	Construction of Tunnel and Safety in Rail Tunnel Construction Work.	Tunneling	Works
153	17102	Integrated	Cavity Formation in Tunnelling & Its Rectification in USBRL Project	Tunneling	Works
154	16201	Sr.Professional	CRS Sanction for Increasing Maximum Permissible Speed of Turnouts and Loops from 15 KMPH to 30 KMPH in KTE-SGRL Section	Turnout	Misc
155	14101	Integrated	Comparison between various methods for the replacement of Points & Crossings	Turnout	Track
156	525	Sr. Professional (P-Way)	Increasing Speed on Turnouts on Indian Railways	Turnout	Track
157	16103	Integrated	Frequently Asked Questions on Points & Crossings	Turnout	Track
158	17203	Sr.Professional (P-Way)	Turnouts on Curves	Turnout	Track
159	16103	Integrated	Optimising USFD to Meet Emerging Challenges	USFD	Track

160	16203	Sr.Professional (P-Way)	Improvement in USFD Testing & Specification in Machine for Site Working	USFD	Track
161	18202	Sr.Professional (P-Way)	USFD - Issues in field and suggestions	USFD	Track
162	18202	Sr.Professional (P-Way)	USFD Techniques & Scan Plan	USFD	Track
163	16104	Integrated	Vigilance Perspective While Preparing Estimates, Tender of Works and Execution	Vigilance related issues	Works
164	17102	Integrated	Water Audit Policy 2017	Water Audit	Misc
165	16101	Integrated	Water Audit & Water Conservation Report at BKSC- 2016	Water audit	Works
166	17202	Sr.Professional (Bridge)	Effluent Treatment Plant in Hubli Workshop	water supply	Bridge
167	17101	Integrated	Prevention of RO Water Wastage & Its Re-use in IR	water supply	misc
168	14202	SAG Refereshher	Water Treatment on IR towards Safe Water Supply	water supply	Misc
169	18101	Integrated	Technical presentation of 0.4 MLD water recycling & conservation plant established at Yesvantpur (Bengaluru) SW Rly	water supply	Misc
170	16104	Integrated	Water Recycling Plant	water supply	Works
171	16104	Integrated	Floating Caisson – Well Foundation	Well Foundation	Bridge
172	17101	Integrated	Presentation on Working of Track Relaying Train (TRT)	Working of trak relaying train	Track
173	16203	Sr.Professional (P-Way)	Ensuring Safety at Work Sites	Worksite Safety	Track