



डीएमआरसी अकादमी  
DMRC Academy

# TRAINING CALENDAR 2026-27 (External)



**Transforming Training:  
Pursue Excellence with  
Expert Guidance**



 दिल्ली मेट्रो रेल कॉर्पोरेशन लिमिटेड  
DELHI METRO RAIL CORPORATION LTD.

(A JOINT VENTURE OF GOVT. OF INDIA AND GOVT. OF DELHI)  
Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi - 110001.



## डीएमआरसी अकादमी DMRC Academy

(सीबीसी के राष्ट्रीय मानकों के अंतर्गत प्रत्यापित, एनसीवीईटी द्वारा मान्यता - दोहरी श्रेणी तथा आईएसओ 9001:2015 एवं आईएसओ 14001:2015 प्रमाणित)  
(Accredited under CBC's National Standards, Recognition by NCVET - Dual Category and ISO 9001:2015 & ISO 14001:2015 Certified)

# ACADEMY EXTERNAL TRAINING CALENDAR 2026-27

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## ABOUT DMRC ACADEMY

Since its inception, DMRC has realized the need of competency building in rail based urban transportation systems. In its efforts to impart world class training, a dedicated Training Institute was set up & inaugurated on 19<sup>th</sup> July 2002 in Shastri Park Train Depot of DMRC.

The DMRC Academy is located at relatively quieter but otherwise very well accessible location in Delhi. The Shastri Park Train Depot, DMRC's first maintenance depot, is just adjacent to the DMRC Academy which facilitates hands on exposure to the trainees with in the premises.

Over the years the DMRC Academy has successfully trained over one lakh employees of DMRC who have been instrumental in efficient and effective working of the organization.

Besides this, the DMRC Academy has honor to train employees from almost all the metros in India as well as overseas trainees.

The DMRC Academy is well equipped with most modern training infrastructure and facilities to impart effective training in a technology enabled learning environment.

The DMRC Academy has also spread its tentacles abroad by training overseas trainees.





## Key insights into the DMRC ACADEMY

- ❖ Is accredited under Capacity Building Commission's National Standards by NABET.
  - ❖ DMRC Academy has been granted dual recognition by the National Council for Vocational Education and Training (NCVET) as both an awarding body and an Assessment Agency.
  - ❖ Is ISO 9001:2015 accredited for design, development and delivery of training programmes. The DMRC Academy is equipped with state of art training infrastructure, most advanced Simulators for training in the field of operations and maintenance.
  - ❖ ISO 14001:2015 certification, recognizing its commitment to effective environmental management practices and sustainability standards..
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- ❖ Has the distinction of developing the staff capabilities and competence building of not only DMRC employees but also employees from other metro systems in India.
  - ❖ Has expertise in planning and organizing training for all the job profiles for DMRC employees. We also offer customized metro based training for other metros and organizations.
  - ❖ Also the DMRC Academy has expanded its horizons overseas with the training of MRT Jakarta, Dhaka and Sri Lankan officials.





## SIGNALING SYSTEMS

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
1.	STC/Signal/01/2026	BT-CBTC Axle Counter (ELS -95)	01-02 Apr. 2026	02 Days	Offline
2.	STC/Signal/02/2026	BT – CBTC ATS	04-06 May 2026	03 Days	Offline
3.	STC/Signal/03/2026	BT – CBTC ATP	22-24 Jun. 2026	03 Days	Offline
4.	STC/Signal/04/2026	Nippon ATS	06-08 Jul. 2026	03 Days	Offline
5.	STC/Signal/05/2026	Nippon Axle Counter (ACS-2000)	24-25 Aug. 2026	02 Days	Offline
6.	STC/Signal/06/2026	Nippon ATP	28-30 Sep. 2026	03 Days	Offline
7.	STC/Signal/07/2026	Uninterrupted Power Supply	21-23 Oct. 2026	03 Days	Offline
8.	STC/Signal/08/2026	IRS Point Machine	16-20 Nov. 2026	05 Days	Offline
9.	STC/Signal/09/2026	Platform Screen Doors	21-23 Dec. 2026	03 Days	Offline
10.	STC/Signal/01/2027	Interlocking Processing Unit (KONTRON)	27-29 Jan. 2027	03 Days	Offline
11.	STC/Signal/02/2027	Workshop on Card Replacement	16 Feb. 2027	01 Day	Offline
12.	STC/Signal/03/2027	Interfacing of Signaling With P. Way	23-25 Mar. 2027	02 Days	Offline

\*Program Briefs at Annexure-A (Pg. No. 9 and 10)

**Batch Manager**

**Sh. M. C. Joshi,**

Associate Professor (Signaling),

Mob: 9910375439,

Email: mohan.chandra.joshi@dmrc.org





## TELECOMMUNICATIONS & AUTOMATIC FARE COLLECTION (AFC) SYSTEMS

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
1.	STC/Telecom/01/2026	Radio System	20-22 Apr. 2026	03 Days	Offline
2.	STC/Telecom/02/2026	AFC Gate System	18-20 May 2026	03 Days	Offline
3.	STC/Telecom/03/206	Clock System	15-17 Jun. 2026	03 Days	Offline
4.	STC/Telecom/04/2026	TVM / RCTM / SCVM	20-22 Jul. 2026	03 Days	Offline
5.	STC/Telecom/05/2026	PIDS - PAS System	17-19 Aug. 2026	03 Days	Offline
6.	STC/Telecom/06/2026	TOM System	21-22 Sep. 2026	02 Days	Offline
7.	STC/Telecom/07/2026	Uninterrupted Power Supply	21-23 Oct. 2026	03 Days	Offline
8.	STC/Telecom/08/2026	SDH – PDH System	16-18 Nov. 2026	03 Days	Offline
9.	STC/Telecom/09/2026	CCTV System	14-16 Dec. 2026	03 Days	Offline
10.	STC/Telecom/01/2027	Telephone System	18-20 Jan. 2027	03 Days	Offline
11.	STC/Telecom/02/2027	Networking System	15-17 Feb. 2027	03 Days	Offline
12.	STC/Telecom/03/2027	Fiber Optics Transmission System	15-16 Mar. 2027	02 Days	Offline

\*Program Briefs at Annexure-B (Pg. No. 11 and 12)

**Batch Manager**  
**Sh. Vivek Kumar,**  
 Associate Professor (Tele-AFC),  
 Mob: 9650288377,  
 Email: vivek.17981@dmrc.org





## CIVIL ENGINEERING

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
1.	STC/Civil/01/26	Durability Aspect	15 May 2026	01 Day	Offline
2.	STC/Civil/02/26	Retrofitting of Distressed Concrete Structures	17 Jul. 2026	01 Day	Offline
3.	STC/Civil/03/26	Expert Lecture by Ex. MD (Dr. Mangu Singh)	31 Jul. 2026	01 Day	Hybrid
4.	STC/Civil/04/26	Workshop on "QCBS Method of Tendering"	21 Aug. 2026	01 Day	Offline
5.	STC/Civil/05/26	Expert Lecture by Ex. MD (Dr. Mangu Singh)	18 Sep. 2026	01 Day	Hybrid
6.	STC/Civil/07/26	Detailed Project Report Preparation & Project Appraisal	20 Nov. 2026	01 Day	Offline
7.	STC/Civil/01/27	Ultra High Performance Concrete	29 Jan. 2027	01 Day	Offline
8.	STC/Civil/02/27	Optimization in design of MRTS Civil Structures	12 Feb. 2027	01 Day	Offline
9.	STC/Civil/03/27	Expert Lecture by Ex. MD (Dr. Mangu Singh)	05 Mar. 2027	01 Day	Hybrid
10.	STC/Civil/04/27	Steel Fiber Reinforced Concrete	19 Mar. 2027	01 Day	Offline

\*Program Briefs at Annexure-C (Pg. No. 13)

**Batch Manager**

**Sh. Amit Kirar,**

Associate Professor (Civil),

Mob: 9560452406,

Email: amit\_10500@dmrc.org





## ROLLING STOCK

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
1.	STC/RS/M&P/01/26	Operation & Maintenance of Machines and Plants used in Rolling Stock depots	20-21 Apr. 2026	02 Days	Offline
2.	STC/RS/M&P/02/26	Operation & Maintenance of Machines and Plants used in Rolling Stock depots	18-19 May 2026	02 Days	Offline
3.	STC/RS/MLR/01/26	Vehicle Control Circuit and Pneumatic Circuits of Metro Train	15-16 Jun. 2026	02 Days	Offline
4.	STC/RS/PROC/01/26	Training on Important and Safety related Rolling Stock Procedures	17-18 Aug. 2026	02 Days	Offline
5.	STC/RS/PROC/02/26	Training on Important and Safety related Rolling Stock Procedures	16-17 Oct. 2026	02 Days	Offline
6.	STC/RS/MLR/02/26	Vehicle Control Circuit and Pneumatic Circuits of Metro Train	21-22 Dec. 2026	02 Days	Offline

\*Program Briefs at Annexure-D (Pg. No. 14)

**Batch Manager**

**Sh. Mukesh Kumar,**

Professor (Rolling Stock),

Mob: 9871952390,

Email: mukesh.466@dmrc.org



## ELECTRICAL ENGINEERING

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
<b>Traction</b>					
1.	STC/Traction/01/2026	Power Transformers and its preventive maintenance	06 May 2026	01 Day	Offline
2.	STC/Traction/02/2026	Protection Philosophy in Traction System	08 Jul. 2026	01 Day	Offline
3.	STC/Traction/03/2026	Power Cables	18 Nov. 2026	01 Day	Offline
4.	STC/Traction/01/2027	Failures in (OHE) System and action taken	13 Jan. 2027	01 Day	Offline
<b>E&amp;M</b>					
1.	STC/E&M/01/26	Ventilation & Air conditioning -VRV, ECS & TVS – Overview, failures and remedies	14 May 2026	01 Day	Offline
2.	STC/E&M/02/26	Rescue procedure in Elevator, failures leading to passenger trappings & action to be taken	14 Jul. 2026	01 Day	Offline
3.	STC/E&M/03/26	Elevator Rescue and analysis of recent trappings	14 Oct. 2026	01 Day	Offline
4.	STC/E&M/01/27	Ventilation & Air conditioning – VRV, ECS & TVS – Overview, failures and remedies	14 Jan. 2027	01 Day	Offline

\*Program Briefs at Annexure-E (Pg. No. 15)

**Batch Manager**

**Sh. C. K. Prasad,**  
Associate Professor (Traction),  
Mob: 9958690650,  
Email: ckprasad@dmrc.org





## OPERATIONS

S/N	Batch ID	Topic	Planned Dates	Duration	Mode
1.	STC/OPS/01/26	Regulatory Compliances: Regulations governing MRTS	13 May 2026	½ Day	Online
2.	STC/OPS/02/26	Integrated Block Management	01 Jul. 2026	½ Day	Online
3.	STC/OPS/03/26	Crew Management and Block / Permit to Work Management System	12 Nov. 2026	½ Day	Online
4.	STC/OPS/01/27	Emerging Technologies in Ticketing payment system in MRTS	10 Feb. 2027	½ Day	Online

\*Program Briefs at Annexure-F (Pg. No. 16)

**Batch Manager**

**Sh. Vatsal Bhardwaj,**  
Associate Professor (Operations)  
Mob: 9650671070  
Email: vatsal\_15292@dmrc.org

# SIGNALING SYSTEMS PROGRAM BRIEFS

## 1 BT – CBTC Axle Counter (ELS-95) (01-02 Apr. 2026; 02 Days; Offline)

Two days short-term course focuses on the BT-CBTC Axle Counter ELS-95 system, an essential component of the signaling and train control infrastructure used in the Delhi Metro Rail Corporation (DMRC). The system is responsible for accurately counting the axles of trains to determine their position, ensuring precise train tracking, and contributing to the overall safety and efficiency of the metro network. It provides in-depth knowledge of the BT-CBTC Axle Counter system, its implementation, operation, troubleshooting, and maintenance to ensure its optimal performance.

## 2 BT – CBTC ATS (04-06 May 2026; 03 Days; Offline)

Three days short term course focuses on the BT-CBTC ATS (Automatic Train Supervision) system, a vital technology used for the safe, efficient, and automated control of train movements within the Delhi Metro Rail Corporation (DMRC). The course covers the operation, integration, maintenance, and troubleshooting of the BT-CBTC ATS system, emphasizing its role in optimizing train operations and ensuring passenger safety. It provides in-depth knowledge of the BT-CBTC ATS system, its implementation, operation, troubleshooting, and maintenance, ensuring the smooth, safe, and efficient operation of metro services.

## 3 BT – CBTC ATP (22-24 Jun. 2026; 03 Days; Offline)

Three days short term course provides specialized training on the BT-CBTC ATC (Automatic Train Control) system, a cutting-edge signaling technology used in the Metro's. It focuses on the operation, configuration, and maintenance of the BT-CBTC ATC system, designed to improve train safety, operational efficiency, and network capacity. It provides in-depth knowledge of the Bombardier CBTC ATC system, its implementation, operation, troubleshooting, and maintenance, ensuring the smooth, safe, and efficient operation of metro services.

## 4 Nippon ATS (06-08 Jul. 2026; 03 Days; Offline)

Three days short term course focuses on the NIPPON-CBTC ATS (Automatic Train Supervision) system, a vital technology used for the safe, efficient, and automated control of train movements within the Delhi Metro Rail Corporation (DMRC). The course covers the operation, integration, maintenance, and troubleshooting of the NIPPON-CBTC ATS system, emphasizing its role in optimizing train operations and ensuring passenger safety. It provides in-depth knowledge of the NIPPON-CBTC ATS system, its implementation, operation, troubleshooting, and maintenance, ensuring the smooth, safe, and efficient operation of metro services.

## 5 Nippon Axle Counter (ACS-2000) (24-25 Aug. 2026; 02 Days; Offline)

Two days short-term course focuses on the Nippon Axle Counter ACS-2000 system, an essential component of the signaling and train control infrastructure used in the Delhi Metro Rail Corporation (DMRC). The system is responsible for accurately counting the axles of trains to determine their position, ensuring precise train tracking, and contributing to the overall safety and efficiency of the metro network. It provides in-depth knowledge of the Nippon-CBTC Axle Counter system, its implementation, operation, troubleshooting, and maintenance to ensure its optimal performance.

## 6 Nippon ATP (28-30 Sep. 2026; 03 Days; Offline)

Three days short term course provides specialized training on the Nippon CBTC ATC (Automatic Train Control) system, a cutting-edge signaling technology used in the Metro's. It focuses on the operation, configuration, and maintenance of the Nippon CBTC ATC system, designed to improve train safety, operational efficiency, and network capacity. It provides in-depth knowledge of the Nippon CBTC ATC system, its implementation, operation, troubleshooting, and maintenance, ensuring the smooth, safe, and efficient operation of metro services.



## 7 Uninterrupted Power Supply

(21-23 Oct. 2026; 03 Days; Offline)

Three days short term course on Uninterrupted Power Supply (UPS) used in Metro's plays a crucial role in ensuring continuous, reliable power to critical systems that must operate without interruption. The main functions of UPS in Metro's are Power backup during failure, Protection of sensitive equipment, Continuous power supply for critical system, Preventive system shutdown, Battery charging and power stabilization, Extended runtime during Extended failure, Load Management and distribution etc. This course covers the Introduction, Working Principal, Types, Components, Applications, Installation, Configuration, Operation & Maintenance, Troubleshooting and fault Diagnosis of UPS System. The primary goal of the short-term course on UPS (Uninterrupted Power Supply) systems is to equip maintenance staff with the essential knowledge and skills required to operate, maintain, troubleshoot, and ensure the reliability of UPS systems used in critical metro operations. The course aims to provide practical and theoretical insights to ensure continuous power supply and system reliability for Metro's infrastructure.

## 8 IRS Point Machine

(16-20 Nov. 2026; 05 Days; Offline)

Three days short-term course focuses on the IRS Point Machine, an essential component of the railway signalling system used for the operation and locking of track turnouts. The IRS point machine ensures safe train routing by moving switch rails to the required position, securely locking them, and detecting their correct position. The course covers the installation, working principle, operation, maintenance, adjustment, and troubleshooting of IRS point machines. The primary goal of this course is to equip maintenance and signalling personnel with the knowledge and practical skills necessary to effectively operate, inspect, maintain, and troubleshoot IRS point machines, ensuring safe, reliable, and efficient train operations.

## 9 Platform Screen Doors

(21-23 Dec. 2026; 03 Days; Offline)

Three days short-term course focuses on the Platform Screen Door (PSD) system, which is an essential safety and operational feature in the Metro. PSDs are installed at metro station platforms to provide physical separation between passengers and trains, ensuring enhanced safety, reducing accidents, and improving operational efficiency. The course covers the installation, operation, maintenance, and troubleshooting of PSD systems. The primary goal of this course is to equip maintenance personnel with the knowledge and skills necessary to effectively operate, maintain, and troubleshoot Platform Screen Doors to ensure smooth, safe, and efficient metro operations.

## 10 Interlocking Processing Unit (KONTRON)

(27-29 Jan. 2027; 03 Days; Offline)

Three days short term course which offers comprehensive training on the "Interlocking Processing Unit(IPU)" a critical components of the train signaling and control system used in Metro's. This course focuses on the functionality, configuration, operation and maintenance of KONTRON IPU which ensure safe and efficient train movement by managing track signaling and Interlocking logic. It provides in deep understanding of KONTRON-IPU system's role in Metro Operation enabling them to effectively manage, operate and troubleshoot the system to ensure the smooth and safe operation in metro.

## 11 Workshop on Card Replacement

(16 Feb. 2027; 01 Day; Offline)

One day workshop focuses on Card Replacement in the context of Metro systems, particularly for the train control and signaling systems that rely on specialized cards for operation. The workshop provides practical training and hands-on experience in the process of identifying, replacing, and testing faulty or outdated cards used in various Metro systems. The workshop is to provide Metro staff with the skills required to safely and efficiently replace malfunctioning or outdated cards in various systems, ensuring continued operational reliability, safety, and performance across metro services.

## 12 Interfacing of Signaling with P. Way

(23-25 Mar. 2027; 02 Days; Offline)

Two days short-term course which is designed to provide a comprehensive understanding of the interfacing between Signaling and Permanent Way (P-Way) components within the metro's. The course covers the integration and coordination between signaling systems, track infrastructure, and communication networks to ensure safe, efficient, and reliable train operations. It provides in-depth knowledge to understand the interaction between signaling and track infrastructure (P-Way), which will help in effectively manage and troubleshoot these integrated systems, ensuring seamless metro operations.



# TELECOMMUNICATIONS & AUTOMATIC FARE COLLECTION (AFC) SYSTEMS

## PROGRAM BRIEFS

### 1 Radio System

(20-22 Apr. 2025; 03 Days; Offline)

Three days short term course focuses on the Radio system used in Delhi Metro Rail Corporation (DMRC). The course covers the Train Radio, Radio Access unit, Hand portable, Zetron, Radio Control Workstation. Maintenance and troubleshooting of the Radio system, emphasizing its role to communicate with each other within the Metro premises. It provides in-depth knowledge of the Radio system, its implementation, operation, troubleshooting and maintenance. After the completion of the course trainee will be evaluated through written examination.

### 2 AFC Gate System

(18-20 May 2025; 03 Days; Offline)

The AFC Gate Training Course of three days focuses exclusively on the operation, configuration, and maintenance of Automatic Fare Collection gates used in metro stations. It provides detailed understanding of gate types, hardware components, software interface, operating modes and passenger validation processes such as smart card, NCMC and QR ticketing. The training includes hands-on practical sessions for gate parameter settings, reader and sensor testing and real-time monitoring. Participants also learn preventive maintenance practices and troubleshooting techniques for common faults and alarms.

### 3 Clock System

(15-17 Jun. 2026; 03 Days; Offline)

Three days short term course focuses on the Clock system. Introduction to Master clock, Sub-Master Clock. Interfaces of clock system with other systems. The course covers the operation, integration, maintenance and troubleshooting of the Clock system. It provides in-depth knowledge of Clock system, its operation, troubleshooting and maintenance. After the completion of the course trainee will be evaluated through written examination.

### 4 TVM/RCTM/SCVM

(20-22 Jul. 2026; 03 Days; Offline)

TIM (Ticket Issuing Machine) Training is a two days technical course focused on the operation, software handling, and maintenance of ticket vending/issuing machines used in metro AFC systems. It covers machine types such as TVM/RCTM/SCVM, hardware modules, payment and reader devices, software architecture, and transaction processing. The training includes practical sessions on preventive maintenance, diagnostics, peripheral testing, and common fault rectification.

### 5 PIDS - PAS System

(17-19 Aug. 2026; 03 Days; Offline)

Three days short term course provides specialized training on the PIDS-PAS system. It focuses on the operation, configuration, Troubleshooting and maintenance of the PIDS-PAS system. It provides in-depth knowledge of the PIDS - PAS system, its implementation, operation, troubleshooting and maintenance procedures. After the completion of the course trainee will be evaluated through written examination.

### 6 TOM System

(21-22 Sep. 2026; 02 Days; Offline)

TOM (Ticket Office Machine) Training is a two days technical course focused on the operation, software handling, and basic maintenance of Ticket Office Machines used in metro AFC systems. The course covers TOM hardware components, software modules, ticket printing, smart card and QR scanning devices and communication with Station and Central Computers. It includes preventive maintenance practices and troubleshooting of common hardware and software faults.



## 7 Uninterrupted Power Supply

(21-23 Oct. 2026; 03 Days; Offline)

Three days short term course on Uninterrupted Power Supply (UPS) used in Metro Railways. The main functions of UPS in Metro's are Power backup during failure, Protection of sensitive equipment, Continuous power supply for critical system, Preventive system shutdown, battery charging and power stabilization, Extended runtime during Extended failure, Load Management and distribution etc. This course covers the Introduction, Working Principal, Types, Components, Applications, Installation, Configuration, Operation and Maintenance, Troubleshooting and fault Diagnosis of UPS System. The primary goal of the short-term course on UPS (Uninterrupted Power Supply) systems is to equip maintenance staff with the essential knowledge and skills required to operate, maintain, troubleshoot, and ensure the reliability of UPS systems used in critical metro operations. The course aims to provide practical and theoretical insights to ensure continuous power supply and system reliability for Metro's infrastructure. After the completion of the course trainee will be evaluated through written examination.

## 8 SDH – PDH System

(16-18 Nov. 2026; 03 Days; Offline)

Three days short term course which offers comprehensive training on the "SDH & PDH " used in Metro's. This course focuses on the functionality, configuration, operation and maintenance of SDH & PDH system. It provides in deep understanding of SDH & PDH system's role in Metro Operation enabling them to effectively manage, operate and troubleshoot the system to ensure the smooth and safe operation in metro. After the completion of the course trainee will be evaluated through written examination.

## 9 CCTV System

(14-16 Dec. 2026; 03 Days; Offline)

Three days short term course provides specialized training on the CCTV system. It focuses on the operation, configuration, maintenance and troubleshooting of the CCTV system. It provides in-depth knowledge of the CCTV system, its implementation, operation, troubleshooting and maintenance for the smooth, safe, and efficient operation of metro services. After the completion of the course trainee will be evaluated through written examination.

## 10 Telephone System

(18-20 Jan. 2027; 03 Days; Offline)

Three days short-term course focuses on the Telephone system, its importance, types, numbering plan and its connectivity. It provides in-depth knowledge of the Telephone system, its implementation, operation, troubleshooting and maintenance. After the completion of the course trainee will be evaluated through written examination.

## 11 Networking System

(15-17 Feb. 2027; 03 Days; Offline)

Three days short-term course which is designed to provide a comprehensive understanding of the Networking system. The course covers the network media, cables, connectors and their protocols. It provides in-depth knowledge to understand the networking system, which will help in effectively manage and troubleshoot these integrated systems, ensuring seamless metro operations. After the completion of the course trainee will be evaluated through written examination.

## 12 Fiber Optics Transmission System

(15-16 Mar. 2027; 02 Days; Offline)

Two days short-term course which is designed to provide a comprehensive understanding of Fiber Optics Transmission System (FOTS). The course covers basic concepts of optical fiber, structure of fiber cable, Link budgeting, tools used in splicing machine, their parts, different types of connector and their losses. It provides in-depth knowledge to understand FOTS system, which will help in effectively manage and troubleshoot FOTS system, ensuring seamless metro operations. After the completion of the course trainee will be evaluated through written examination.



# CIVIL ENGINEERING PROGRAM BRIEFS

## 1 Durability Aspect of Concrete (15 May 2026; 01 Day; Offline)

This program will enable trainees to explain the concept of concrete durability and identify mechanisms of concrete deterioration. The session will also cover evaluation of permeability and transport properties of concrete, along with assessment of testing methods for durability evaluation.

## 2 Retrofitting of Distressed Concrete Structures (17 Jul. 2026; 01 Day; Offline)

This program will enable trainees to explain the concept and need for retrofitting, identify types and symptoms of structural distress, and conduct condition assessment and diagnosis. The session will also cover evaluation of retrofitting and strengthening techniques.

## 3 Expert Lecture by Ex. MD (Dr. Mangu Singh) (31 Jul. 2026; 01 Day; Hybrid)

Experience Sharing by Former MD,DMRC on MRTS Project & Construction Management related topics.

## 4 Workshop on "QCBS Method of Tendering" (21 Aug. 2026; 01 Day; Offline)

This program will enable trainees to explain the concept and rationale of QCBS and describe the regulatory and procedural framework of QCBS. The session will also cover preparation of tender documents under QCBS and performance of financial proposal evaluation and combined scoring.

## 5 Expert Lecture by Ex. MD (Dr. Mangu Singh) (18 Sep. 2026; 01 Day; Hybrid)

Experience Sharing by Former MD,DMRC on MRTS Project & Construction Management related topics

## 6 Detailed Project report Preparation & Project Appraisal (20 Nov. 2027; 01 Day; Offline)

This program will enable trainees to explain the purpose and structure of a Detailed Project Report (DPR) and conduct feasibility analysis and prepare technical sections of a DPR. The session will also help participants understand institutional and funding perspectives, incorporate risk management and sustainability considerations, and prepare and present a comprehensive DPR for approval.

## 7 Ultra High Performance Concrete (29 Jan. 2027; 01 Day; Offline)

This program will enable trainees to explain the fundamentals of Ultra High Performance Concrete (UHPC) and describe the composition and material constituents of UHPC. The session will also help participants understand mechanical and durability properties, analyse mix design principles and production techniques, and apply structural design considerations using UHPC.

## 8 Optimization in design of MRTS Civil Structures (12 Feb. 2027; 01 Day; Offline)

This program will enable trainees to explain the fundamentals of optimization in structural design and understand the structural components of MRTS systems. The session will also cover application of optimization techniques in structural configuration and incorporation of material optimization strategies, along with evaluation of cost, constructability, and sustainability trade-offs and analysis of case studies of optimized MRTS structures.

## 9 Expert Lecture by Ex. MD (Dr. Mangu Singh) (05 Mar. 2026; 01 Day; Hybrid)

Experience Sharing by Former MD,DMRC on MRTS Project & Construction Management related topics

## 10 Steel fibre Reinforced Concrete (19 Mar. 2027; 01 Day; Offline)

This program will enable trainees to explain the fundamentals of Steel Fibre Reinforced Concrete (SFRC) and identify types and properties of steel fibres and understand mechanical behaviour of SFRC. The session will also cover application of mix design and production techniques and design of structural elements using SFRC principles, along with evaluation of applications of SFRC in infrastructure projects and assessment of durability and long-term performance.



**ROLLING STOCK****PROGRAM BRIEFS****1****Operation & Maintenance of Machines and Plants used in Rolling Stock depots**

(20-21 Apr. 2026; 02 Days; Offline)

This two-day short-term program focuses on the critical machines and plants essential for enhancing safety, reducing accidents, and improving maintenance efficiency of metro trains. It covers the operation and maintenance of key equipment used in metro depots and workshops. The program aims to equip maintenance personnel with the knowledge and practical skills required to effectively operate, maintain, and troubleshoot these machines and plants, ensuring smooth, safe, and efficient metro operations.

**2****Operation & Maintenance of Machines and Plants used in Rolling Stock depots**

(18-19 May 2026; 02 Days; Offline)

This two-day short-term program focuses on the critical machines and plants essential for enhancing safety, reducing accidents, and improving maintenance efficiency of metro trains. It covers the operation and maintenance of key equipment used in metro depots and workshops. The program aims to equip maintenance personnel with the knowledge and practical skills required to effectively operate, maintain, and troubleshoot these machines and plants, ensuring smooth, safe, and efficient metro operations.

**3****Vehicle Control Circuit and Pneumatic Circuits of Metro Train**

(15-16 Jun. 2026; 02 Days; Offline)

This program provides an overview of rolling stock systems designed to ensure high levels of safety and reliability, focusing on the complex vehicle control and logic circuits used in modern trains. Participants will gain an understanding of essential control circuits, including basic circuits, brake loops, door loops, and pneumatic circuits. The program also includes case studies of significant failures in vehicle control circuits to provide practical insight into system behaviour and troubleshooting.

**4****Training on Important and Safety related Rolling Stock Procedures**

(17-18 Aug. 2026; 02 Days; Offline)

This program covers essential and safety-related RS procedures critical to safe train operations and maintenance. It provides step-by-step guidance on train movements, implementation of power blocks in inspection bay lines, and safe working practices on the roof and under gear of trains. The program also details standard procedures for coupling and uncoupling trains on a unit basis, a key requirement during maintenance activities. Additionally, participants will be trained in the correct procedures for moving trains in cases of axle lock and derailment, ensuring preparedness to handle emergency situations safely and effectively.

**5****Training on Important and Safety related Rolling Stock Procedures** (16-17 Oct. 26; 02 Days; Offline)

This program covers essential and safety-related RS procedures critical to safe train operations and maintenance. It provides step-by-step guidance on train movements, implementation of power blocks in inspection bay lines, and safe working practices on the roof and undergear of trains. The program also details standard procedures for coupling and uncoupling trains on a unit basis, a key requirement during maintenance activities. Additionally, participants will be trained in the correct procedures for moving trains in cases of axle lock and derailment, ensuring preparedness to handle emergency situations safely and effectively.

**6****Vehicle Control Circuit and Pneumatic Circuits of Metro Train**

Batch ID: STC/RS/MLR/01/26

(21-22 Dec. 2026; 02 Days; Offline)

The module will cover all basic circuits, brake loops, door loops and pneumatic circuits etc along with a case study on important failures in the vehicle control circuits.



# ELECTRICAL ENGINEERING

## PROGRAM BRIEFS

### TRACTION

- 1 Power Transformers and its preventive maintenance** (06 May 2026; 01 Day; Offline)  
 Trainees will be able to understand the working, group and features of Power Transformer. Maintenance Schedule of the Transformer and safety precaution shall be also discussed.

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- 2 Protection Philosophy in Traction System** (08 Jul. 2026; 01 Day; Offline)  
 Under this topic various types of protections that are being used in Traction System and philosophy adopted in the protection scheme shall be discussed.

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- 3 Power Cables** (18 Nov. 2026; 01 Day; Offline)  
 Under this topic general construction, application and laying of Power Cables shall be briefed.

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- 4 Failures in Over Head Equipment (OHE) System and action taken** (13 Jan. 2027; 01 Day; Offline)  
 In this topic general types of failure that occur in OHE system and their remedial action will be discussed.

### E&M

- 1 Ventilation & Air conditioning – VRV, ECS & TVS – Overview, failures and remedies** (14 May 2026; 01 Day; Offline)  
 Trainees will be able to understand various ventilation and air conditioning systems in metro stations and analyze their failures.

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- 2 Rescue procedure in Elevator, failures leading to passenger trappings & action to be taken** (14 Jul. 2026; 01 Day; Offline)  
 Trainees will be able to execute elevator rescue procedure, analyze root cause leading to passenger trappings and will be able to download & understand data from elevators.

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- 3 Elevator Rescue and analysis of recent trappings** (14 Oct. 2026; 01 Day; Offline)  
 Trainees will be able to execute elevator rescue procedure, analyze root cause leading to passenger trappings and will be able to download & understand data from elevators.

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- 4 Ventilation & Air conditioning – VRV, ECS & TVS – Overview, failures and remedies** (14 Jan. 2027; 01 Day; Offline)  
 Trainees will be able to understand various ventilation and air conditioning systems in metro stations and analyze their failures.



**OPERATIONS****PROGRAM BRIEFS****1****Regulatory Compliances: Regulations governing MRTS**

(13 May 2025; ½ Day; Online)

- Detailed exploration of relevant sections and provisions in 'Opening of Metro Railways for Public Carriage of Passengers Rules'.
- Overview of various forms annexed under the rule.
- In-depth discussion on common questions raised during inspection by CMRS.

**2****Integrated Block Management**

(01 Jul. 2026; ½ Day; Online)

- Fundamentals of Integrated Block Management (IBM)
- Block Planning, Scheduling & Interdepartmental Coordination Block Execution, Monitoring & Permit-to-Work Procedure
- Safety Protocols, Emergency Handling & Risk Mitigation Best Practices in Block Management: Case Study

**3****Crew Management and Block / Permit to Work Management System**

(12 Nov. 2026; ½ Day; Online)

- Overview of crew management procedures etc. in MRTS.
- Utilization of Crew Management System (CMS) through kiosks, mobile apps and desktop interfaces.
- Block and Permit-to-Work (PTW) management as outlined in Safety Circular 2, ensuring compliance with safety protocols and work regulations.

**4****Emerging Technologies in ticketing payment system in MRTS**

(10 Feb. 2027; ½ Day; Online)

- Overview of innovative ticketing methods such as mobile ticketing, QR based payment systems, Automatic Bank Transfer etc.
- Implementation and benefits of National Common Mobility Card (NCCM) for seamless travel across different transport modes. Integration of mobile wallets for easy transactions.







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## डीएमआरसी अकादमी DMRC Academy

(सीबीसी के राष्ट्रीय मानकों के अंतर्गत प्रत्यापित, एनसीवीईटी द्वारा मान्यता - दोहरी श्रेणी तथा आईएसओ 9001:2015 एवं आईएसओ 14001:2015 प्रमाणित)  
(Accredited under CBC's National Standards, Recognition by NCVET - Dual Category and ISO 9001:2015 & ISO 14001:2015 Certified)

Train Depot, Shastri Park, East Approach Road, Delhi-110053  
Email: [principal@dmrc.org](mailto:principal@dmrc.org) | <https://dmrcacademy.delhimetrorail.com/>