mtrAcademy

caring for life's journeys

Professional Programme in ASSET MANAGEMENT (PPAM)

11th Intake

Available Winter 2025

In-Person

Join industry experts from the UK, Singapore and Hong Kong in their experience sharing

Networking

Meet railway professionals and asset owners around the globe

Discussion

Collaborate in teams to present on key topics in asset management and share ideas

Site Visit

Site visit to MTR (Shenzhen) included

Who Should Attend

Executives, managers, engineers employed by infrastructure asset owners, custodians, railway operators and maintainers; government planners and regulators; industry practitioners and researchers of relevant research disciplines

Schedule

24 – 27 November 2025

Venue

Hong Kong and Shenzhen

Language

English

The station names on the Northern Link are working titles only. As the planning and design works of the Northern Link project are still in progress, all drawings and visuals are provided for concept illustration only, and the content is subject to change.

PROFESSIONAL PROGRAMME IN ASSET MANAGEMENT

Join industry experts for a comprehensive look at asset management principles specific to large-scale infrastructure systems, with applications drawn from the expertise in railway infrastructure management of metro operators in Hong Kong and Singapore.

Overview

The programme begins with a focus on the fundamental principles and best practices of Asset Management (AM), setting the stage for the discussions to follow. A case study from Singapore highlights key challenges in AM implementation, especially those arising from divided responsibilities between asset owners and operators. This year's discussions expand to two highly relevant topics in the AM domain: Asset Condition Assessment (ACA) and Computerised Maintenance Management Systems (CMMS).

To support further exchange and insight, a site visit to MTR (Shenzhen) offers a practical opportunity to observe and share approaches to asset monitoring and maintenance.

Objectives

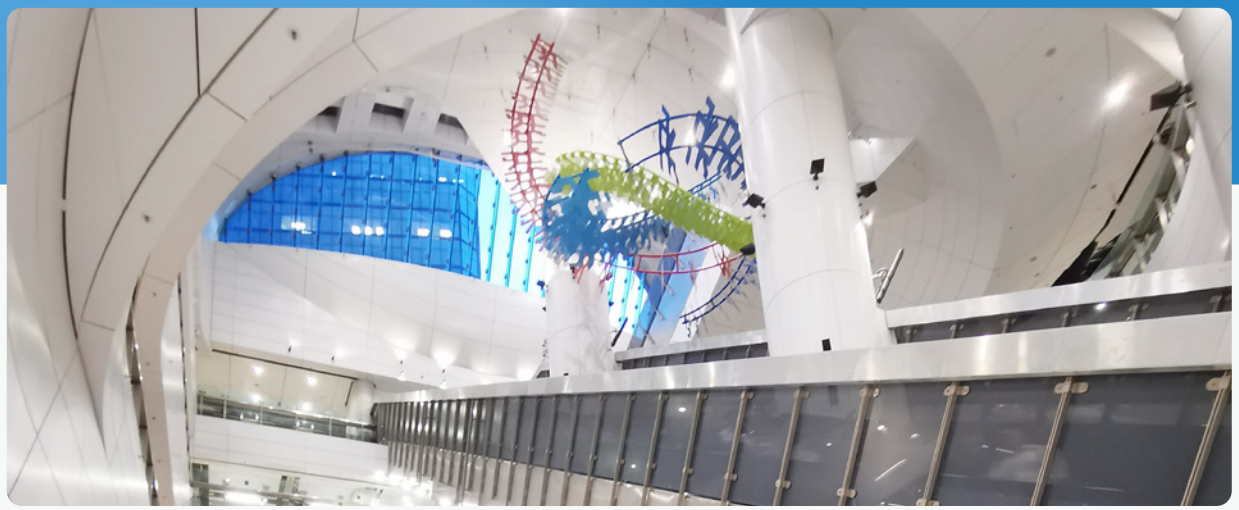
- Deepen your understanding of asset management by exploring its key principles, frameworks, and processes—while staying current with the latest best practices.
- Appreciate the importance of establishing multi-level connections between corporate owners/operators and their asset management systems, and learn how to maximise value by cultivating these links.
- Gain insights from the practical experiences of asset owners and operators across various stages of the asset lifecycle.
- Develop an asset management system tailored to your specific business objectives and operational needs.

Schedule

	A.M.	P.M.
Day 1 24 Nov (Mon)	**Module 1.1** Introduction and the Principles of Asset Management **Module 1.2** Drivers for Asset Management and Developing Asset Management Policy and Strategic Asset Management Plan	**Module 2.1** Risk Management in Asset Management **Module 2.2** Decision-Making in Asset Management
Day 2 25 Nov (Tue)	**Module 3.1** Gross Cost and Nett Cost Models **Module 3.2** Roles and Responsibilities Between Asset Owners/PTOs/OEMs **Module 3.3** Key Business Processes of Asset Management Governance Works	**Module 4.1** Information and People in Asset Management **Module 4.2** Asset Lifecycle Delivery and Reflection on the Discipline of Asset Management
Day 3 26 Nov (Wed)	**Module 5** Asset Condition Assessment	Travel to Shenzhen MTR 港鐵 **MTR (Shenzhen) Visit**
Day 4 27 Nov (Thu)	**Module 6** Integration of Asset Management and Computerised Maintenance Management System (CMMS)	**Module 7** Group Presentation Graduation Ceremony

PTO = Public Transport Operator
OEM = Original Equipment Manufacturer

Programme Content



Module 1

Asset Management Principles & Drivers

This module sets the tone by embedding the foundational mindset of long-term stewardship.

Learn the fundamental principles that define modern asset management. Explore:

- Why asset management is vital for sustainable infrastructure systems
- The lifecycle perspective—from acquisition to retirement
- Roles and responsibilities across stakeholders, including C-suite leadership, line managers, and engineering teams
- How strategic alignment and governance drive organisational value through assets

Module 2

Risk Management & Decision-Making

Practical case scenarios show how good decision-making reduces lifecycle costs and avoids reactive interventions.

Master the art of making informed choices across an asset's lifespan. This module covers:

- Risk identification, evaluation, and mitigation techniques
- The importance of assurance, asset data accuracy, and continuous monitoring
- Demand forecasting and its connection to corporate objectives
- Development of asset strategies and policies linked to business priorities
- Whole Life Cost (WLC) modelling to help quantify trade-offs between performance, cost, and risk

Module 3

Asset Management at Singapore's Land Transport Authority (LTA)

It's a real-world anchor to ground theory in tested policy and operational excellence.

Get an inside look into one of Asia's most mature transport agencies. This module explores:

- Singapore's strategic shift from operator- to government-owned model and its impact on cost and stakeholder responsibilities
- LTA's rail business processes for asset performance, maintenance governance and lifecycle sustainability
- Case study on proactive oversight on operator's maintenance regime and forward-looking renewal planning to safeguard reliability and resilience

Programme Content

Module 4

Information, People & Lifecycle Delivery

This module connects the dots between vision, execution, and performance.

Delve into the operational engine of AM—people and systems. Understand:

- How strategic requirements are derived from top-level priorities
- Stakeholder engagement strategies and change management
- The line-of-sight concept to ensure cohesion from boardroom to frontline
- Use of predictive analytics during lifecycle phases

Module 5

Asset Condition Assessment (ACA)

A must-have toolbox for avoiding premature renewals or catastrophic surprises.

A critical function often overlooked until failure occurs. Learn:

- Why proactive assessment saves costs and boosts safety
- The structured methodology for assessing railway E&M systems
  - Physical Condition: examine the tangible state of the assets
  - Functional Performance: verify if the assets operate as intended, meeting its design specifications and operational requirements
  - Maintenance Practices: review effectiveness of current maintenance regimes, analysing both procedures and outcomes, and alignment with asset criticality.
- Regulatory trends pushing global rail operators toward transparency.

Module 6

Integration of Asset Management (AM) & Computerised Maintenance Management System (CMMS)

This module helps participants conceptualise and plan an integrated AM/CMMS solution with high ROI.

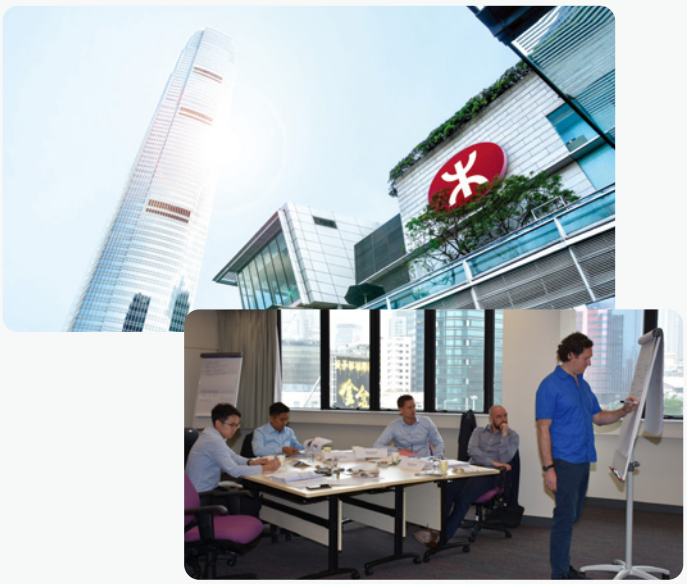
Build an effective digital management system to support AM. Explore:

- Unified Data Structure: bidirectional data flows between AM and CMMS
- Automated Workflow Alignment: streamlining maintenance processes with AM strategies
- Enhanced Decision Support: leveraging integrated data for informed decision-making
- Advanced Analytics: predictive and prescriptive analytics for proactive management
- Mobility & Field Integration: real-time data access and updates in the field
- Continuous Improvement Loops: feedback mechanism for ongoing optimisation

Module 7

Group Presentation & Graduation

Collaborate in teams to present on key topics in asset management. Share ideas, sharpen your understanding, and celebrate the journey in a closing ceremony that recognises your growth and achievements.



Synopsis

Modules 1, 2 & 4

Speaker: Mr Paul BURCOMBE

The three modules collectively highlight the key features of modern-day infrastructure asset management, set the tone for the discussions and sharing in the subsequent modules and align the understanding of asset management among the participants. They aim to

- Recognise the importance of asset management, as well as the roles and responsibilities of different stakeholders and top management in the asset management process
- Examine the vital role of risk management in the whole life decision-making process, and how to adopt good practices such as monitoring, assurance as well as asset information in the asset management journey
- Understand how corporate objectives and demand drive asset management in a corporate setting; how to develop asset management strategies, policies and planning; and how to use the Whole Life Cost (WLC) model to enhance judgement during the decision-making process
- Define strategic requirements (demand, stakeholder engagement, understanding business from top management) and maintain a line of sight
- Gain insight into various asset management techniques and tools adopted during the asset lifecycle

Module 3: LTA's Rail Asset Management Framework

Speakers:
Er. Adrain CHEONG, Mr Swee Chong TENG, Ms Seow Yan HO

This module explores Singapore's strategic shift in rail policy—from an operator-owned model to a government-owned framework under the New Rail Financing Framework (NRFF). It analyses how this transition fundamentally redefined the roles and responsibilities of key stakeholders, including asset owners and rail operators (Public Transport Operators). Key policy changes such as adjustments to license periods, revised profit- and risk-sharing arrangements, and enhancements to the regulatory regime will be discussed.

With the Land Transport Authority (LTA) assuming ownership of rail assets, the government now leads long-term capital investments in network capacity expansion and asset renewals to support a growing population. As a result, LTA's rail business processes have evolved from rail service performance regulation to include focus on: driving long-term asset performance, strengthening governance and oversight on asset maintenance, and optimising lifecycle sustainability.

The session will conclude with a case study highlighting the critical importance of proactive oversight of the Public Transport Operator's (PTO) maintenance regime and the need for forward-looking renewal planning to ensure continued reliability, resilience, and sustainability of Singapore's rail infrastructure.

Module 5: Asset Condition Assessment for Railway E&M Systems – A Practical Approach

Speaker: Ir Dr Y.W. TUNG

Periodic condition assessments are increasingly mandated by rail authorities worldwide. Beyond regulatory compliance, these assessments deliver significant value to asset owners and operators, such as preventing premature replacements, minimising unplanned downtime, and mitigating catastrophic failures. Yet, determining a cost-effective approach remains a challenge.

In this module, participants will explore a structured methodology for assessing railway E&M systems, covering three critical dimensions: Physical Condition, Functional Performance and Maintenance Practices.

- Physical Condition – Examines the tangible state of the asset
- Functional Performance – Verifies whether the asset operates as intended, meeting its design specifications and operational requirements
- Maintenance Practices – Reviews the effectiveness of established maintenance regimes, analysing both procedures and their outcomes

This balanced approach ensures thorough yet economical evaluations, supporting smarter asset management decisions.

Module 6: Integration of Asset Management (AM) and Computerised Maintenance Management System (CMMS)

Speaker: Ir Dr Y.W. TUNG

The integration of Asset Management (AM) and Computerized Maintenance Management Systems (CMMS) plays a vital role in enhancing the reliability, cost-effectiveness, and strategic decision-making for railway operational assets. In this session, participants will explore current industry best practices and methodologies for developing an integrated AM/CMMS solution, with particular focus on six critical integration aspects:

- Unified Data Integration - Establishing bidirectional data flows between AM and CMMS
- Automated Workflow Alignment - Streamlining maintenance processes with asset management strategies
- Enhanced Decision Support - Leveraging integrated data for informed decision-making
- Advanced Analytics - Applying predictive and prescriptive analytics for proactive management
- Mobility & Field Integration - Enabling real-time data access and updates in the field
- Continuous Improvement Loop - Establishing feedback mechanisms for ongoing optimisation

Participants will also examine a practical implementation roadmap to assess the feasibility of deploying an integrated AM/CMMS solution in their organisations.

Module 7: Group Presentation

Facilitator: Mr Quentin LEUNG

Working in groups, participants shall prepare a presentation discussing various aspects of selected topics on asset management through which they are able to accelerate and reinforce their understanding in asset management.

Speaker Bios

Mr Paul BURCOMBE

AMP, MIAM, MIET, FITOL

Technical Training Manager,
Asset Management Academy

Paul is currently the Technical Training Manager for the Asset Management Academy and holds accountability for quality of training materials and trainer competence across the AM Academy.

Paul is a proven leader with extensive experience of implementing Asset Management capability over a large and diverse portfolio of assets, both from an asset owner perspective and as a consultant in multiple sectors including rail, airports and energy.

A dynamic and dedicated professional, Paul is known for growing capability within the organisations he works with, from the delivery teams implementing Asset Management Plans, to the Executives leading the organisation. He facilitates the implementation of Organisational Objectives through the creation of successful Asset Management Improvement Programmes.

Paul applies his engaging and collaborative style with all stakeholders to achieve their desired outcomes, whether this is growing understanding at an executive level, or preparing a delegate for an Asset Management qualification.

In addition to his commercial commitments, Paul has also supported the IAM with the implementation of qualifications.

Ir Dr Y.W. TUNG

PhD, MSc(Eng), BSc(Hons), CEng MIET, FHKIE

Chief Executive Officer,
KCG Corporation Limited

Dr Tung is a seasoned systems engineer with 25 years of experience in the railway industry. His expertise spans railway operations, maintenance, technical training, large-scale design and construction projects across Hong Kong, Taipei, Kuala Lumpur, Singapore, and Macau.

His technical proficiency includes full lifecycle project management for mainline and mass transit rail systems, with deep knowledge of operations, maintenance, and asset auditing. He specialises in lifecycle costing, including pre-operation assessments, OPEX/CAPEX evaluations and maintenance optimisation.

Er. Adrian CHEONG

B.ENG(HONS), M.SC(ENG), M.SC(UTM), MIES, PE(S)

Group Director, Rail Asset Operations and Maintenance, Singapore Land Transport Authority

Mr Cheong is a registered Professional Engineer in Singapore with over 28 years of experience in railway engineering, particularly within the Singapore Railway Industry. With 20 years of experience in the design and supervision of electrical installations for both road and railway transit projects, he has also spent 15 years specialising in the design, supervision, testing, and commissioning of 22kV AC, 400V AC, and 750V DC electrical systems for Singapore's Rapid Transit Systems.

In 2024, he was appointed as the Group Director of Rail Asset Operations and Maintenance of the Land Transport Authority, overseeing a team of more than 150 engineers and support staff. In this role, he is responsible for ensuring the effective stewardship of railway assets within the Singapore Rapid Transit System.

Prior to this, Mr Cheong served as Director of Rail Regulation and Licensing, where he was responsible for railway legislation, regulation, licensing, and performance, both within Singapore and across borders.

From 2011, Mr Cheong held the position of Deputy Director of Mechanical & Electrical Services, where he led the division in providing design and technical support for both rail and road projects. His work in this capacity covered a wide range of systems, including tunnel ventilation, environmental control systems, fire and safety engineering systems, and power supply systems.

Speaker Bios

Mr Swee Chong TENG

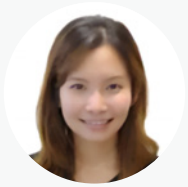
B.ENG(HONS), M.SC(UTM)

Director, Rail Asset Operations and Maintenance, Asset Engineering Steward, Singapore Land Transport Authority

Mr Teng is the Director of Rail Asset Operations and Maintenance, Asset Engineering Steward sub-group at Singapore's Land Transport Authority (LTA), where he leads the strategic oversight of asset engineering and monitoring assets performance as well as ensuring that the asset condition, maintenance and service life are upkept. In addition, he ensures that assets renewals and replacements are done in a safe and cost-effective manner whilst minimising impact to commuters.

In 2024, Mr Teng had served as Deputy Director of Network Renewal Systems at LTA, where he played a pivotal role in the successful delivery of large-scale upgrades across the rail network. His leadership contributed to the modernisation of critical systems including Communications, ISCS and Station Travel Information Systems, strengthening the reliability, safety, and passenger experience of Singapore's rail transport.

With over 25 years of experience in railway engineering, Mr Teng brings deep technical expertise and project leadership across both greenfield and brownfield developments. His experience spans the full project lifecycle—from system design and integration to commissioning and operations. In addition to his work in Singapore, Mr Teng has contributed to major international projects, including the High-Speed Rail initiative, further showcasing his global outlook and versatility in complex transportation systems.



Ms Seow Yan HO

B.ENG(HONS), M.SC(MOT), M.SC(SEM)

Deputy Director, Rail Asset Operations and Maintenance, Asset Management(Systems and Planning), Singapore Land Transport Authority

Ms Ho is the Deputy Director of Rail Asset Operations and Maintenance, Asset Management Systems and Planning Division at Singapore's Land Transport Authority (LTA). With over 16 years of experience in railway engineering, she leads her team in driving the development, enhancement and governance of LTA's comprehensive rail asset management framework as well as advancing innovative strategies that optimise asset lifecycle management and promote sustainability.

Beyond her asset management expertise, Ms Ho also possesses asset engineering stewardship background gained from her tenure in LTA's Rail Asset Operations and Maintenance's Asset Engineering (Systems). There, she led efforts overseeing the maintenance and upkeeping of operating assets, including Signalling Systems and Platform Screen Doors, ensuring optimal asset condition and system performance.

Earlier in her career, Ms Ho contributed to LTA's Rail/Roads Systems Engineering, Systems Assurance Division. She had carried out in-house consultancy works for the Power Supply System for Singapore's Thomson-East Coast line, applying Systems Assurance techniques to guarantee the reliability, availability, maintainability, and safety (RAMS) of the system. Additionally, she led systems assurance management for Communications Systems, Electrical Services, and Tunnel Ventilation Systems for Singapore's Downtown Line project.

Mr Quentin LEUNG

Contract Consultant, International Business, MTR Corporation Limited

Mr Quentin Leung was the senior industry specialist that helmed and guided the highly respected MTR Asset Management System through its implementation and development. He was also involved in the certification of the MTR Asset Management System from PAS 55 to ISO 55001.

During his past 30 years of service with MTR, Mr Quentin Leung worked as a specialist in rolling stock design, new fleets introduction, maintenance and operations, improvement projects in safety, reliability and customer service, mid-life refurbishments and renewals. He spent substantial periods in overseas posting with MTR hubs, including Stockholm, London and Sydney where he took up challenging roles in driving rolling stock operations and maintenance performance, transferring knowledge and best practices on asset management and operations excellence to the local teams. Most importantly he influenced the deployment of operation requirements, standards and processes for new FAO projects.

He also actively supported MTR's business developments through franchise biddings in the UK, Sweden, Middle East, and Australia in the capacity of rolling stock and O&M technical leads.

Satisfied Participants

"Good fundamentals taught and delivered well."
4th Intake

"Very useful course, love the discussion with experts from other countries."
9th Intake

"Good to have numerical example for asset life extension and more details of how risks are qualified."
2nd Intake

"Valuable to show a real case study to demonstrate how MTR applied the theory and practical issues."
3rd Intake

" Good examples to demonstrate the principles of Asset Management by an experienced speaker."
10th Intake

"Depot site visit was interesting."
5th Intake

"All topics are interesting and very important. Speakers were very knowledgeable. Thumbs up!"
1st Intake

Since Year 2017

Organisations who have sponsored their executives to the Professional Programmes (previously named as Executive Programmes) – Partial List

22 countries / regions within Asia, Europe, the Middle East and Australia

Operators & Contractors (Metro & Light Rail)

- Bangkok Expressway and Metro Public Co.
- Chennai Metro Rail Limited
- CRRC Changchun Railway Vehicles Co. Ltd.
- Hong Kong Tramways
- Hop Yuen Construction
- Kum Shing Group
- Lausanne Public Transport Company
- Light Rail Manila
- Mass Rapid Transit Jakarta
- Metro Jeddah Company
- Metro Sao Paulo
- Metro Trains – Melbourne
- Metroselskabet
- Myanmar Railway
- Prasarana Group / MRT (Kuala Lumpur)
- SBS Transit – Singapore
- Seoul Metro
- SMRT – Singapore
- Tokyo Metro

Regulators

- Land Transport Authority (LTA) of Singapore
- Electrical and Mechanical Services Department, The HKSAR Government
- Highways Department, The HKSAR Government
- The Transportation Infrastructure Office (GIT) of Macau

University, R&D

- Railway and Transport StrategyCentre, Imperial College London

Utilities

- HK Electric

Information on Programme Logistics

1. Travel to China

Participants are obligated to obtain visas to enter Hong Kong and Mainland China (to Shenzhen for same-day trip) respectively, except where visa-free entry applies under relevant agreements. Official invitation letters will be provided by MTR Academy upon request to support visa applications after successful registration.

2. Transportation & Lunch

Local and cross-border transportation during the programme will be coordinated by MTR Academy. Participants are encouraged to experience Hong Kong's efficient MTR system independently. Programme fee includes lunch provision.

3. Accommodation & Insurance

Participants are responsible for securing and funding their own accommodation in Hong Kong. The MTR Academy will provide curated hotel recommendations. All participants should obtain comprehensive insurance coverage for the entire programme duration in Hong Kong and Shenzhen, China at their own expense.

4. Arrangements under Adverse Weather

Participants are advised to remain indoors inside a safe location when the Black Rainstorm, Typhoon Signal No. 8 or higher signal is in force. Virtual class will be arranged for the affected session.

Please refer to the Hong Kong Observatory for weather updates:
https://www.hko.gov.hk/en/index.html

Intake Scheme and Programme Fees

For more details and registration, please visit MTR Academy's website.

Programme Enquiry

Please contact Ms Ng at slng@mtr.com.hk or call +852 2520 3453.

mtrAcademy

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