

Programmes that broaden or deepen specific skills and knowledge for the various job roles in the sector

Rail Engineering (Signal and Communications)

Job Role:
Senior Engineer/Engineer (Signal and Communications)

Full Qualification Programmes	Providers
Post-Graduate Certificate in Urban Railway Engineering (Singapore) (For in-service professional)	SMRT Institute, University of Birmingham (UoB)

Technical Skills and Competencies (TSC)			Modular Programmes	Providers
Category	Title	Proficiency Level		
Business Management	Change Management	4	Risk Assessment and Management	Singapore University Of Social Sciences
Business Management	Data and Statistical Analytics	4	NICF - Customer Analytics	Institute of Systems Science, NUS
			NICF - Statistical Thinking for Data Science and Analytics	Lithan Academy Pte Ltd
			NICF-Business Analytics for CIOs and Senior Managers	NUS School of Computing
Business Management	Innovation Management	4	Champion and Facilitate Innovation	Capelle Academy Pte Ltd
			Innovation : Turning Ideas into Gold (Project)	Everest Innovation Pte Ltd
			WSQ Manage Innovation in the Business Function	Singapore Media Academy Pte Ltd
			Manage Innovation in the Business Function	Singapore National Employers Federation
Business Management	Project Management	4	Intermediate Requirements Engineering	Singapore Institute of Technology
			Plan and Manage Project Management	Singapore Polytechnic
			Principles of Project Management	Singapore University Of Social Sciences
Corporate Governance and Policy	Rail Regulatory Compliance	4	Career Onboarding for Railway Engineering (CORE) Programme (For in-service professional)	Singapore Rail Academy (SGRA), Land Transport Authority
People Management	Manpower Planning and Deployment	3	Conduct Competency-based Interview and Make Hiring Decision	Center for Competency-Based Learning and Development Pte Ltd
			Conduct Interviews and Make Hiring Decisions	Human Capital (Singapore) Pte Ltd
			Conduct Interviews and Make Hiring Decisions	Singapore National Employers Federation
			Plan and Conduct Interviews to Facilitate Hiring Decisions	Singapore National Employers Federation
			MC3: Decision Analysis	Temasek Polytechnic
			MC5: Organisational Management	Temasek Polytechnic
Process Improvement	Continuous Improvement Management	4	Conduct Interview and Make Hiring Decisions	Training Masters Workforce Institute Pte Ltd
			Quality Assurance & Quality Control	Ngee Ann Polytechnic
			Safety Management and Audit	Singapore University Of Social Sciences
			Behavioural Based Safety	Singapore University Of Social Sciences
			Cognitive Systems Engineering	Singapore University Of Social Sciences
			Safety, Risk and Resilience Engineering	Singapore University Of Social Sciences
			MC4: Systems Thinking & Methods	Temasek Polytechnic
MC5: Organisational Management	Temasek Polytechnic			
Process Improvement	Systems Engineering Thinking	4	Foundations of Systems Engineering	Singapore Institute of Technology
			Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
			Cognitive Systems Engineering	Singapore University Of Social Sciences
			IMPACT: Advanced Problem Solving and Decision Making Workshop	Capelle Academy Pte. Ltd.
			Apply Systems Thinking in Problem Solving and Decision Making	Service Quality Centre Pte. Ltd.
			Apply Systems Thinking in Problem Solving and Decision Making	Singapore National Employers Federation
			Apply Systems Thinking in Problem Solving and Decision Making	SSA Consulting Group Pte. Ltd.
			Apply Systems Thinking in Problem Solving and Decision Making	Training Vision Institute Pte. Ltd.
Maintenance Management	Condition-based Assets Monitoring Management	3	Facility Management Using ARCHIBUS Asset Building Operations Management	Singapore Institute of Technology
Maintenance Management	Equipment Maintenance and Housekeeping	3	Facility Management Using ARCHIBUS Asset Building Operations Management	Singapore Institute of Technology
Maintenance Management	Maintenance Scheduling	4	Facility Management Using ARCHIBUS Asset Building Operations Management	Singapore Institute of Technology
Rail Systems Maintenance	Communication Auxiliary Systems Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Communication Backbone System Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Communication Power System Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Emergency and Security Communication Systems Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Network Systems Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
			NICF - Administer Server	Lithan Academy Pte Ltd
			NICF - Install and Configure Server	Lithan Academy Pte Ltd
Rail Systems	Radio System Maintenance	4	Fundamentals of Radio Frequency Engineering	Singapore Institute of Technology

Maintenance	Radio System Maintenance	7	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Signal Interlocking Systems Maintenance	4	Introduction to Electromagnetic Compatibility	Singapore Institute of Technology
Rail Systems Maintenance	Signal Interlocking Systems Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Signalling Auxiliary Device and Equipment Maintenance	4	Introduction to Electromagnetic Compatibility	Singapore Institute of Technology
Rail Systems Maintenance	Signalling Auxiliary Device and Equipment Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Trackside Automatic Train Control Equipment Maintenance	4	Introduction to Electromagnetic Compatibility	Singapore Institute of Technology
Rail Systems Maintenance	Trackside Automatic Train Control Equipment Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Supervisory Control and Data Acquisition System Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Trackside Automatic Train Control Equipment Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Train Supervisory System Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Trainborne Automatic Train Control Equipment Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Rail Systems Maintenance	Travel Information System Maintenance	4	Fundamental of Rail Engineering Systems (FRES) (For in-service professional in the Rail Sector)	Singapore Rail Academy (SGRA), Land Transport Authority
Supply Chain Management	Inventory Management	3	MC2: Logistic Management	Temasek Polytechnic
Supply Chain Management	Inventory Management	3	Manage Inventory	INTEGRATED TRAINING CONSULTANTS PTE. LTD.
Supply Chain Management	Inventory Management	3	Manage Inventory	ST ELECTRONICS (E-SERVICES) PTE. LTD.
Supply Chain Management	Inventory Management	3	Manage Inventory	TRAINING MASTERS WORKFORCE INSTITUTE PTE LTD
Supply Chain Management	Inventory Management	3	Manage Inventory	U-TRAINING CENTRE PTE. LTD.
Technology Management	Internet of Things Application	3	Sensors Systems Design for IoT	Institute of System Science (ISS), NUS
Technology Management	Internet of Things Application	3	Introduction to GIS and its Applications	Nanyang Polytechnic
Technology Management	Internet of Things Application	3	Enabling Technology for IoT - II	SMU Academy
Technology Management	Internet of Things Application	3	Building an Internet-of-Things Project	PACE Academy, Singapore Polytechnic
Technology Management	Internet of Things Application	3	Sensors Systems Design for IoT	Institute of System Science (ISS), NUS
Technology Management	Internet of Things Application	3	Introduction to GIS and its Applications	Nanyang Polytechnic
Technology Management	Internet of Things Application	3	Enabling Technology for IoT - II	SMU Academy
Technology Management	Internet of Things Application	3	Building an Internet-of-Things Project	PACE Academy, Singapore Polytechnic
Technology Management	Robotics and Automation Application	3	Basic Microcontroller Programming (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Communication and Vision Systems (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Computer Programming (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Industrial Automation (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Industrial Drive Systems (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Microcontroller Interfacing and Applications (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Unmanned Systems (AMS SBMCs)	Ngee Ann Polytechnic
Technology Management	Robotics and Automation Application	3	Embedded Control Systems: Theory and Practice	Singapore Institute of Technology
Technology Management	Robotics and Automation Application	3	Introduction To Robotics Fundamentals	Singapore Institute of Technology
Technology Management	Robotics and Automation Application	3	Robot Operating System: An Introduction	Singapore Institute of Technology
Technology Management	Technology Application	2	Emerging Products in Automotive Industry	Singapore Institute of Technology
Workplace Safety and Health	Work at Heights	3	Managing Work-at-Height	NTUC Learning Hub
Workplace Safety and Health	Work at Heights	3	Managing Work-at-Height	Singapore Safety Training Centre
Workplace Safety and Health	Workplace Facilities Safety Management	3	Supervise Workplace Safety and Health Practices	AVANTA GLOBAL PTE. LTD.
Workplace Safety and Health	Workplace Facilities Safety Management	3	Modular Certificate in Workplace Safety and Health Management	Institute of Technical Education
Workplace Safety and Health	Workplace Facilities Safety Management	3	Supervise Workplace Safety and Health Practices	INTEGRATED TRAINING CONSULTANTS PTE. LTD.
Workplace Safety and Health	Workplace Safety and Health for Confined Spaces	3	Confine Space Rescue Course	Singapore Safety Training Centre
Workplace Safety and Health	Workplace Safety and Health for Fire Prevention and Fire Fighting	2	Fire Fighter Course 1	Civil Defence Academy
Workplace Safety and Health	Workplace Safety and Health for Fire Prevention and Fire Fighting	2	Advanced Fire Fighting	Singapore Polytechnic
Workplace Safety and Health	Workplace Safety and Health for Fire Prevention and Fire Fighting	2	Advanced Fire Fighting - Practical	Singapore Polytechnic

For Generic Skills and Competencies (GSCs) programme listing, please refer to *Section (v) (c) - View the Training Programmes for Generic Skills and Competencies (GSCs)*. To access the section, click this [link](#)