Trends impacting this role

Sustainability			
AI	Data Analytics	Enterprise Systems	IoT

In the next **1 – 3 years**…

MEDIUM degree of change in tasks

The job will potentially require MODERATE JOB REDESIGN

A fair proportion of the job tasks will be substituted by technology, with human intervention required for high value-adding tasks as against routine, repetitive tasks

Responsibilities of the role <u>today</u>	Responsibilities of the role <u>in the future</u>
The Engineer / Supervisor is responsible for **ensuring the continuous operations** of equipment, components and systems. He/She **supervises the operations** and **maintenance of equipment and systems**. He leads the initiatives for **identifying and implementing innovation** within the organisation. He also follows corporate guidelines and best practices, monitoring compliance of work activities to regulatory and statutory policies, procedures and regulations.	**Moving forward,** this role is still required to ensure the continuous operations of equipment, components, and systems, supervising teams and activities, and leading improvement initiatives. The job holder is required to **utilise technologies in allocating assignments** to team members, **monitoring and managing team performance**, as well as **tracking the performance of equipment** and **systems** and proposing possible solutions. The job holder is also required to possess **strong interpersonal skills** to **coordinate with internal and external stakeholders**, as well as **manage team performance**.

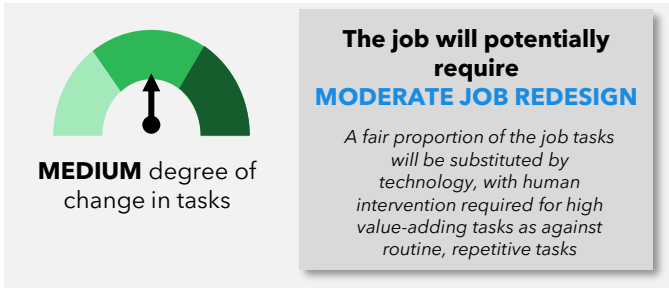| Critical Work Function	Job tasks today	Job tasks within the next 3 years
Maintain equipment and systems	Conduct root cause analysis of equipment and system underperformance, failures, and malfunctions, analysing testing, maintenance, and repair records to identify trend, potential issues, and recommend solutions	• A **combination of Internet of Things (IoT) smart sensors and AI-enabled dashboards** support the **root-cause analysis of equipment and system underperformance, failures, and malfunctions**, and allow the job holder to accurately diagnose issues and determine appropriate solutions. • **Data analytics and visualisation tools** support the **analysis of historical testing, maintenance and repair records** to better identify trends, potential malfunctions, and inform solutions required.
	Assign responsibilities and resources for inspection, testing, repair and predictive maintenance of equipment and systems	• **Internet of Things (IoT)-based applications, integrated with Property Management Systems (PMS) and HR Management Systems (HRMS), monitor and assign work duties**, as well as **track availability and performance of teams**, freeing up time for the job holder to manage team performance or plan for possible manpower shortages. Human intervention may still be required to override and/or adjust work plans in the event of operational exigencies. • The job holder will be required to propose creative and sustainable operating and resourcing plans to mitigate manpower shortages and rising costs in support of business objectives.
Manage health, safety and environment	Ensure team and vendor compliance with organisation's Workplace Safety and Health (WSH) policies and Environmental Management Systems (EMS), conducting accident and incident investigations when needed	• Ensure team and vendor compliance with organisation's Workplace Safety and Health (WSH) policies and Environmental Management Systems (EMS), conducting accident and incident investigations when needed.

Critical Work Function	Job tasks today	Job tasks within the next 3 years
Manage people and organisational function	Ensure adherence to planned budgets and financial forecasts and monitor resource availability to support business operations	• **Enterprise Resource Planning (ERP) solutions** provide **visibility on financial inflows and outflows**, allowing the job holder to identify deviations in budget utilisation and propose corrections to ensure adherence to planned budgets and financial forecasts. • A **combination of Human Resource Management systems (HRMS) and Internet of Things (IoT)-based applications** enable **real-time tracking and monitoring of manpower resource availability**, freeing up time for the job holder to manage the performance of team members or plan for possible manpower shortages.
	Monitor employee performance by utilising performance management systems and provide inputs on team's recruitment, training, and development needs	• A **combination of Human Resource Management systems (HRMS) and Internet of Things (IoT)-based applications** enable **real-time tracking and monitoring of labour productivity** and allow the job holder to better coach and manage team performance. • **Data analytics and visualisation tools** support the **analysis of operations information** relating to business processes and operations performance and allow the job holder to better identify and propose areas for improvement.
	Propose improvements to business processes and operations to drive continuous improvement	• **Data analytics and visualisation tools** support the **analysis of operations information** relating to business processes and operations performance and allow the job holder to better identify and propose areas for improvement.
Conduct operations	Determine resourcing requirements to achieve operational state in accordance with organisational standards	• The job holder will be required to amalgamate various sources of operations information relating to the availability of manpower resources, ongoing and upcoming engineering and maintenance projects, as well as schedules for maintenance and repairs to determine resourcing requirements to achieve operational state in accordance with organisational standards.
	Develop operational plans and Standard Operating Procedures (SOPs) for equipment and systems, including housekeeping and sustainable engineering procedures and standards	• Develop operational plans and Standard Operating Procedures (SOPs) for equipment and systems, including housekeeping and sustainable engineering procedures and standards.
	Devise methods of application for emerging technologies to improve performance monitoring and process troubleshooting, and conduct test runs of new processes, equipment, systems, and controls	• Devise methods of application for emerging technologies to improve performance monitoring and process troubleshooting, and conduct test runs of new processes, equipment, systems, and controls.
	Liaise with internal and external stakeholders, such as procurement team and vendors, to align on planned work activities	• Liaise with internal and external stakeholders, such as procurement team and vendors, to align on planned work activities.
Manage responses to emergencies and crises	Analyse the impact of emergency response plans and relevant safety procedures on operations and coordinate the emergency response team activities	• Analyse the impact of emergency response plans and relevant safety procedures on operations and coordinate the emergency response team activities.

432   *A list of new or additional skills can be found on the following page.*

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In addition to the Skills and Competencies identified in the [Skills Framework for Engineering Services](#), the following additional TSCs and CCSs have been identified as relevant for the job role going forward:

Additional Technical Skills and Competencies (TSCs)		
Data Analytics	Green Facilities Management*	Internet of Things Management

Additional Critical Core Skills (CCSs)		
Adaptability	Digital Fluency	Learning Agility

- Skills denoted by an asterisk (*) are not available in Skills Framework (SFw) for Hotel and Accommodation Services (HAS) but available in other SFw.
- Skills not marked are available in SFw for HAS but are not currently tagged to this job role in the function.