

**SKILLS FRAMEWORK FOR PRECISION ENGINEERING
SKILLS STANDARDS FOR
PRODUCTION SUPERVISOR**

Occupation: Production Supervisor

Occupation Description:

The Production Supervisor supervises production employees to ensure production targets are met in a manufacturing environment in accordance with organisation policies and Workplace Safety and Health regulations. This includes planning, assigning and directing work, coordinating weekly meetings, addressing product and employee complaints, and resolving problems.

He/She also implements policies and procedures and recommends improvements with a view to increase efficiency and productivity in production methods, equipment, operating procedures and working conditions.

Important Points to Note about this Document

This document is intended purely to provide general information to enable individuals, employers and training providers to be informed about the skills for career, training and education purposes. SkillsFuture Singapore Agency provides no warranty whatsoever about the contents of this document, and does not warrant that the courses of action mentioned in this document will secure employment, promotion, or monetary benefits. WDA will not be liable for any loss, damage or expense that individuals may incur as a result of reliance on the contents of this document.

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The skills expected of the Production Supervisor are summarised as below:

Skill Category	Skill Sub-Category	Skills
Operations Planning		PRE-OPL-4001-1 Plan Cost Estimates for a Product
		PRE-OPL-4002-1 Plan Resources to Meet Production Processes
		PRE-OPL-4003-1 Manage the Installation of New Product Manufacturing Processes
		PRE-OPL-4004-1 Manage Production Planning and Scheduling
		PRE-OPL-4005-1 Manage Plant Shut-down and Re-start
		PRE-OPR-4002-1 Manage Enterprise Resource Planning
		PRE-OPR-4003-1 Conduct Trials
Maintenance		PRE-MAI-4007-1 Facilitate and Implement a Pro-active Maintenance Strategy
Sustainable Manufacturing		PRE-SMN-4001-1 Plan and Implement Sustainable Work Practices
Value Analysis		PRE-VMA-4001-1 Plan Value Analysis of Products and Processes
Manufacturing Productivity and Innovation		PRE-MPI-4009-1 Manage Lean Manufacturing for Productivity Improvement
		PRE-MPI-4008-1 Manage Continuous Improvement
		PRE-MPI-4010-1 Contribute to Innovation Process within own Scope of Work in Business Unit
		PRE-MPI-4011-1 Manage Innovation in the Business Function

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Skill Category	Skill Sub-Category	Skills	
Supply Chain and Logistics Management		PRE-SCL-4001-1	Manage a Supply Chain
		PRE-SCL-4002-1	Manage Logistics Planning and Process
		PRE-SCL-4003-1	Manage Procurement and Inventory
Quality Management Systems		PRE-QMS-4001-1	Manage Quality Systems and Processes
Workplace Safety and Health		PRE-WSH-4007-1	Support Workplace Safety and Health Risk Management
		PRE-WSH-4006-1	Manage Workplace Safety and Health Systems
Business Analytics		PRE-BAN-4002-1	Apply Data Visualisation
		PRE-BAN-4001-1	Solve Problems using Operations Research Techniques
Business Negotiation		BM-BN-401E-1	Participate in Negotiations
		BM-BN-402E-1	Participate in Dispute Resolution
Communication		BM-COM-303E-1	Present Information
		BM-COM-304E-1	Write Reports
		BM-COM-402E-1	Manage Meetings
Accounting		BM-AC-303E-1	Apply Knowledge of Accounting-related Concepts
		BM-FIN-305E-1	Prepare Cash Flow Report for the Business Unit
Finance		BM-FIN-403E-1	Manage Budgeting and Forecasting Processes for the Business Unit
		BM-FIN-406E-1	Monitor Cash Flow Reports

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Skill Category	Skill Sub-Category	Skills	
		BM-FIN-407E-1	Conduct Financial Analysis of the Business Unit
Human Resource Management		PRE-HRM-4001-1	Support Individual Learning and Development
		PRE-HRM-4002-1	Manage Employee Relations
Info-Communication Technologies		PRE-ICT-5002-1	Produce Advanced Spreadsheet Outputs using Spreadsheet Applications
Intellectual Property		PRE-IPR-5001-1	Apply Knowledge of Intellectual Property to Support IP-related Organisational Procedures
Project Management		BM-PM-401E-1	Conduct Project Feasibility Study
		BM-PM-403E-1	Manage Project Team
		BM-PM-405E-1	Manage Project Resources
		BM-PM-406E-1	Manage Project Procurement
		BM-PM-407E-1	Manage Project Costs
		BM-PM-408E-1	Manage Project Timeline
		BM-PM-409E-1	Manage Project Quality
		BM-PM-410E-1	Manage Project Risk
		BM-PM-412E-1	Conduct Project After-action Review
		BM-PM-402E-1	Manage Project Scope
Risk Management		BM-RM-303E-1	Apply Risk Management Procedures
Sales and Marketing		PRE-SMA-4001-1	Understand Sales and Marketing in a Manufacturing Organisation

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Skill Category	Skill Sub-Category	Skills	
Strategic Planning and Implementation		PRE-SPI-4002-1	Understand Business Management
		PRE-SPI-4001-1	Manage and Review Systems and Processes
Personal Management and Development		ES-PMD-403G-1	Apply Emotional Competence to Manage Self and Others in a Business Context
		ES-PMD-404G-1	Contribute Towards a Learning Organisation
		ES-PMD-405G-1	Manage Workplace Challenges with Resilience
Analytical, Conceptual and Evaluative		ES-ACE-401G-1	Support the Establishment of a Framework for Initiative and Enterprise
		ES-ACE-402G-1	Solve Problems and Make Decisions at Managerial Level
Interpersonal		ES-IP-401G-1	Lead Workplace Communication and Engagement
		ES-IP-402G-1	Develop a Work Team
		ES-IP-403G-1	Lead a Virtual Team

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Skill Code	PRE-OPL-4001-1	Skill Category	Operations Planning
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Plan Cost Estimates for a Product		
Skill Description	This skill describes the ability to estimate and source requirements for jobs. This involves gathering information on cost estimates from suppliers and documenting quotations.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Key requirements of product • Principles of estimating costs • Work organisation and planning processes • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify key requirements of the product for cost estimation • Prepare cost estimates according to key requirements and in accordance with organisational procedures • Prepare cost estimate report for submission 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek to provide the best value for the cost estimate 		

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Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Liaise with suppliers on information needed for compiling cost estimates
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Factors that affect the viability of a job must include:</p> <ul style="list-style-type: none"> • Staff resources • Standard service or repair times • Specifications • Timeframes for sub-contracted jobs • Availability of parts and resources <p>Cost estimations must include costs of:</p> <ul style="list-style-type: none"> • Manpower • Resources, e.g. materials, parts • Special resources • Time

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Skill Code	PRE-OPL-4002-1	Skill Category	Operations Planning
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Plan Resources to Meet Production Processes		
Skill Description	This skill describes the ability to plan required resources for production processes over specified timeframes taking into account resources available and required. This includes ensuring the optimum use of resources and meeting quality assurance procedures.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Types of production processes • Method to determine production processes to be used • Resources required for production • Organisational procedures relating to resource planning • Quality assurance procedures related to planning resource needs • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine production processes to be used • Obtain production specifications to identify resources required for production • Estimate resources required in accordance with production process and organisational procedures • Identify potential problems which may affect the availability of resources • Resolve resource supply or quality issues in accordance with organisational procedures • Record all resource data in accordance with organisational requirements 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Ensure optimum use of resources when planning resource requirements to meet production processes • Adhere to quality assurance procedures when planning resource requirements to meet production processes 		

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<i>values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Communicate additional support required to carry out production processes • Apply ethical work practices when planning resource needs
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Ascertain best practices from past resource plans to aid in planning resource needs
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Resources required for production processes must include:</p> <ul style="list-style-type: none"> • Manpower • Equipment and tools • Materials and parts • Special resources • Human resources • Time

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Skill Code	PRE-OPL-4003-1	Skill Category	Operations Planning
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Installation of New Product Manufacturing Processes		
Skill Description	This skill describes the ability to plan and manage the installation of new manufacturing processes. This includes establishing customer build dates and the delivery schedule for the product.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Tools and techniques for planning and monitoring installation process • Construction design management techniques used in the installation process • Mechanism used to establish customer build and delivery schedule • Principles and techniques used in the installation planning exercise • Factors to take into account for disseminating information before and after an installation planning process • Organisational procedures and information systems for storing installation plans • Procedures used in installation planning exercise • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Confirm customer build dates and delivery schedule requirements for the new product • Determine organisational availability of in-house equipment against the planned manufacturing layout • Create delivery plans for in-house or new equipment and resources against the planned manufacturing layout • Determine removal plans for redundant services and equipment from the planned manufacturing area • Establish installation plans for new services in the new manufacturing area against the agreed floor plan layout • Identify and agree individual delivery plans with sub-contractors or machine builders for the manufacturing area • Construct a master plan for the installation of the new manufacturing process against agreed floor play layout • Implement and manage the installation of the new manufacturing process against the master plan 		

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	<ul style="list-style-type: none"> • Deal promptly and effectively with any problems during the installation process • Record the results of planning and installation activities, in accordance with agreed procedures
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Maximise use of planned manufacturing area to reduce wastage
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Report project progress to relevant parties at agreed stages of the plan
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	N/A
<p>Range of Application (where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill</i></p>	N/A

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<i>may be demonstrated.</i>	
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Skill Code	PRE-OPL-4004-1	Skill Category	Operations Planning
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Production Planning and Scheduling		
Skill Description	This skill describes the ability to plan schedules for production planning. This involves understanding production requirements and capacities for the production of a component or part.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	The ability to understand: <ul style="list-style-type: none"> • Types of production, e.g. jobbing production, batch production, process production • Production requirements and capacity • Tooling and/or equipment requirements for different types of production processes • Production scheduling techniques • Organisational procedures relating to production planning and scheduling • Workplace Safety and Health Regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	The ability to: <ul style="list-style-type: none"> • Identify production requirements and capacity from specifications • Determine production sequence in accordance with organisational procedures • Prepare production schedule of a component or part in accordance with requirements and organisational procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	The ability to: <ul style="list-style-type: none"> • Ensure the optimal use of resources when planning production schedules 		

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Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Liaise with production team when preparing production plans and schedules
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Ascertain best practices that could be used in the preparation of production plans and schedules
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Production requirements and capacity must include: <ul style="list-style-type: none"> • Engineering production data • Inventory capacities and requirements • Procurement and supply requirements • Standard times for the production of a component or part • Workplace safety and health requirements Production schedule must include: <ul style="list-style-type: none"> • Customer requirements • Time constraints • Production requirements • Machine availability and capability • Inventory requirements • Procurements • Supply capacities • Contingency analysis

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Skill Code	PRE-OPL-4005-1	Skill Category	Operations Planning
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Plant Shutdown and Re-start		
Skill Description	This skill describes the ability to co-ordinate the shutdown and restarting of a production process in a safe and efficient manner due to a planned or an emergency unplanned shutdown or emergency situation. This includes balancing the varying requirements to ensure the shutdown occurs with maximum safety to personnel, plant, the environment and the business' productivity.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Principles of operation of plant or equipment • Routine problems, faults and their resolution • Methods of starting, stopping, operating and controlling process • Corrective action appropriate to the problem cause • Function and troubleshooting of major components and their problems • Types and causes of problems within one's scope of skill level and responsibility • Emergency shutdown procedures • Organisational procedures relating to plant shutdown and restart • Workplace Safety and Health Regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Check and verify safety systems to ensure that the unit has been made safe • Identify the reason for, or cause of the shutdown by troubleshooting the system and utilising all available data and information systems • Obtain confirmation of the identified shutdown from production team to verify both the nature and the reliability of the shutdown • Rectify or initiate procedures to rectify the fault or shutdown cause through either repair of the operational fault or re-adjustment before returning the system to start-up status • Conduct the start-up process in accordance with organisational procedures and workplace safety and health procedures • Record any further ongoing production problems and report to appropriate persons or authority 		

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<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>N/A</p>
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Liaise with production team when managing plant shutdown and restart
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Learn from causes of shutdown to avoid future incidences of shutdown
<p>Range of Application (where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Causes of shutdown must include:</p> <ul style="list-style-type: none"> • Planned, e.g. for maintenance or other planned work • Unplanned, e.g. in response to a plant upset or equipment failure • Emergency, e.g. in response to an automatic shutdown sequence or plant trip <p>Appropriate action to be taken must include:</p> <ul style="list-style-type: none"> • Determining problems needing action • Determining possible fault causes • Rectifying problem using appropriate solution within area of responsibility • Following through items initiated until final resolution has occurred • Reporting problems outside area of responsibility to designated person

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Skill Code	PRE-OPR-4002-1	Skill Category	Operations Production
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Enterprise Resource Planning		
Skill Description	This skill describes the ability to manage an organisation's resources through the use of Enterprise Resource Planning (ERP) solutions. This includes understanding how basic business processes are represented within an ERP solution and how it is integrated within the ERP solution.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Fundamental and key concepts of Enterprise Resource Planning (ERP) systems • Logic and approach to generate Master Production Schedule (MPS) in different manufacturing environments • Bill of Material (BOM) structures • Concept of Materials Requirements Planning (MRP) • Fundamentals of inventory management • Approach to calculate inventory level and control inventory • Methods to decide order quantities • Implementation methodology for ERP system • Emerging techniques and trends in ERP systems 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage sales orders received from customers • Plan MPS based on sales plan, sales orders and production capacity • Set and manage inventory levels • Plan material requirements and production work orders • Create purchase orders for suppliers • Generate delivery orders and invoices • Plan and update inventory status • Handle exceptional cases 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	N/A		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Keep abreast of emerging techniques and trends in ERP systems
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Master Production Schedule (MPS) must include:</p> <ul style="list-style-type: none"> • Make-to-order • Make-to-stock • Assemble-to-order <p>Concept of Materials Requirement Planning (MRP) must include:</p> <ul style="list-style-type: none"> • Logic of MRP • Techniques in MRP and its calculation • Planned order receipts and releases • Gross and net requirements <p>MRP techniques must include:</p> <ul style="list-style-type: none"> • Exploding and offsetting

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- Gross and net requirements
- Releasing orders
- Low-level coding and netting

Fundamentals of inventory management must include:

- Inventory classification and functions
- ABC inventory control
- Principles and policies for purchasing, Economic-order quantity (EOQ) and Period-order quantity (POQ)

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Skills Code	PRE-OPR-4003-1	Skill Category	Operations Production
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Conduct Trials		
Skill Description	This skill describes the ability to carry out pre-production trials and monitor the critical path of trial production prior to bulk production. This includes checking the outcomes of trial production against specifications and selecting materials, components, machinery and equipment.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Interpret work instructions and specifications accurately • Organisational guidelines for conducting pre-production trials and tests • Types of adjustments permitted • Types of records required • Roles and responsibilities of those involved in trials • Methods of evaluating trial results • Methods to measure production rates and usage of materials • Methods of improving production efficiency • Quality assurance procedures • Limits and criticalities of machine settings • Sources of information on machinery and process developments • Content of a pre-production specification • Critical path during the pre-production process • Sample analysis techniques K16 appropriate equipment and materials for sample analysis • Characteristics of materials and their properties • Methods of calculating production resource requirements • Components of a product specification • Technical aspects of product development • Impact of customer requirements on production • Compatibility of machine and product • Organisational procedures for sample production • Sample costing methods • Sample development methods • Content of a sample specification • Alternative methods of production • Ways of adjusting specifications within machine capabilities and cost constraints • Importance of achieving quality and its relation to the end user or customer 		

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	<ul style="list-style-type: none"> • Ways of resolving with problems within the work area • Production process and how one’s specific work activities relate to the whole process • Importance of effective communication with colleagues • Organisation’s procedures relating to quality standards • Workplace Safety and Health regulations
<p>Application and Adaptation</p> <p><i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Plan and schedule pre-production trials • Carry out trials to agreed specification and monitor the process • Develop a critical path of activities at each stage of the pilot • Check the outcomes of trial production against specification • Ensure accurate information, complete specifications and relevant samples are available • Carry out a pre-production trial • Monitor and record the progress of products during the trial process • Check products made in pre-production trials meets specifications • Evaluate the outcomes of pre-production trial • Evaluate the potential for bulk processing • Establish likely materials usage and production rates of bulk processing • Provide information and trial results to appropriate people • Contribute to the development of a final production specification and pass it on • Record results of the trials following the critical path • Ensure samples and trial products are approved and authority given for bulk production to commence • Complete and store accurate records and documentation
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify problems and recommend corrective action • Modify specifications to achieve cost effective results • Check trial results and products after pre-production methods have been amended • Recommend ways of improving production efficiency

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<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Ensure authority has been given for pre-production trials and is communicated to the relevant people
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Learn from past pre-production trials by examining historical data to ensure past mistakes are not repeated
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	PRE-MAI-4007-1	Skill Category	Maintenance
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Facilitate and Implement a Pro-active Maintenance Strategy		
Skill Description	This skill describes the ability to facilitate the implementation of a pro-active maintenance strategy for an organisation. It also includes determining appropriate maintenance related schedules and providing maintenance related assistance to non-maintenance personnel.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Requirements of the proactive maintenance strategy being implemented • Operating principles and procedures for equipment/plant subject to proactive maintenance strategy • Purpose and processes for data collection in proactive maintenance strategies • Procedures relevant to own job and organisation implementation of proactive maintenance • Methods of making/recommending improvements • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine manufacturer's recommended inspection, servicing and related schedules for relevant plant • Develop schedules in liaison with relevant personnel to ascertain suitable time(s) when maintenance may be scheduled including optimum timing for shutdown • Identify inspections and servicing which may be done by production team in liaison with relevant stakeholders • Plan pro-active maintenance tasks to fit in with maintenance and production schedules 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Recommend changes to improve plant or equipment reliability in accordance with organisational procedures • Recommend improvements to reliability strategy in accordance with procedures 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Consult with relevant personnel with regard to appropriate inspections, services and schedules • Discuss scheduling conflicts with relevant personnel
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Ascertain patterns from maintenance schedules and equipment down-time when planning maintenance schedules
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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Skill Code	PRE-SMN-4001-1	Skill Category	Sustainable Manufacturing
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Plan and Implement Sustainable Work Practices		
Skill Description	This skill describes the ability to implement and monitor integrated environmental and resource efficiency management policies and procedures within the organisation.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Compliance requirements within work areas for all relevant environmental and sustainability concerns • Legislation, regulations and codes of practice including resource hazards and risks associated with work areas, job specifications and procedures • Environmental and energy efficiency issues, systems and procedures specific to industry practice • External benchmarks and support for particular benchmarks to be used within organisation, including approaches to improving resource use for work area and expected outcomes • Workplace Safety and Health regulations • Supply chain procedures 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse procedures for assessing compliance with environmental and sustainability regulations • Collect information on environmental and resource efficiency systems and procedures • Analyse and document current purchasing strategies • Implement and integrate environmental and resource efficiency improvement plans • Monitor the implementation of improvement plans to evaluate its effectiveness 		
Innovation and Value Creation <i>It refers to the ability to generate</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Supervise and support team members to identify possible areas for improved practices and resource efficiency in work area • Analyse current work processes to access information and data to 		

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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<p><i>purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>assist in identifying areas for improvement</p> <ul style="list-style-type: none"> • Evaluate alternative solutions to workplace environmental issues
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek input from key stakeholders on targets for improvement
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Monitor past incidences of maintenance to discern trends to form part of pro-active maintenance strategy
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Environmental and resource efficiency improvement plans includes:</p> <ul style="list-style-type: none"> • Addressing environmental and resource sustainability initiatives such as environmental management systems, action plans, green office programs, surveys and audits • Applying the waste management hierarchy in the workplace • Determining organisation's most appropriate waste treatment including waste to landfill, recycling, re-use, recoverable resources and wastewater treatment • Initiating and/or maintaining appropriate organisational procedures for operational energy consumption, including stationary energy and non-stationary (transport) • Preventing and minimising risks, and maximising opportunities such as: <ul style="list-style-type: none"> ○ Improving resource/energy efficiency ○ Reducing emissions of greenhouse gases

**SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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| | <ul style="list-style-type: none">○ Reducing use of non-renewable resources○ Referencing standards, guidelines and approaches |
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SKILLS FRAMEWORK FOR PRECISION ENGINEERING
SKILLS STANDARDS FOR
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Skill Code	PRE-VMA-4001-1	Skill Category	Value Analysis
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Plan Value Analysis of Products and Processes		
Skill Description	This skill describes the ability to review production costs data to identify cost reduction opportunities. It includes the ability to analyse value-adding and non-value adding activities and the information needs for successful value stream mapping.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Purpose of value analysis • Methods of value analysis and mapping value stream • Concept of waste and value in terms of customer benefits • Types of waste and methods of reducing it • Production costs • Customer requirements • Performance standards • Production process • Cost reduction methods • Cost components • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Map the value stream of the products or processes • Determine the features or benefits obtained by customers from the products • Identify value added by each internal and external step • Monitor cost reduction strategies to determine its effectiveness 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities to reduce waste and component costs • Identify opportunities to reduce production cycles 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek endorsement for proposed cost reduction initiatives • Communicate cost reduction strategies to production team to ensure understanding
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Monitor best practices in production through industry data and intelligence to further enhance one's knowledge in identifying opportunities to reduce waste
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Waste is any activity which does not contribute to customer benefit / features in the product. Categories of waste include:</p> <ul style="list-style-type: none"> • Excess production and early production • Delays • Movement and transport • Poor process design • Inefficient performance of a process • Making defective items

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Skill Code	PRE-MPI-4009-1	Skill Category	Manufacturing Productivity and Innovation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Lean Manufacturing for Productivity Improvement		
Skill Description	This skill describes the ability to manage the organisation's lean manufacturing through the use of various lean tools in the areas of materials, processes and machines. It also includes lean implementation planning and understanding the impact on the organisation in support productivity improvement programmes.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Seven wastes of production • Benefits of lean manufacturing • Performance measurement areas in lean manufacturing • Steps to achieve lean performance results • Objectives of production and inventory control • Types of inventory by function and by condition • Lean manufacturing tools for improved inventory flow and material flow • Lean implementation checklist • Steps required for successful lean implementation • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify types of waste within the organisation • Perform inventory classification using ABC analysis • Calculate economic batch quantity and number of kanbans required • Calculate production capacity and TAKT time • Determine the need for preventive maintenance within the organisation • Implement lean manufacturing at various levels in the organisation and within various areas for improvement 		
Innovation and Value Creation <i>It refers to the ability</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Recommend an improved process flow 		

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<i>to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Consult with the production team to gather information to identify reasons for deviation from organisation’s key performance indicators
Learning to Learn <i>It refers to the ability to develop and improve one’s self within and outside of one’s area of work.</i>	N/A
Range of Application <i>(where applicable)</i> <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Lean manufacturing tools for improved inventory management and material flow include: <ul style="list-style-type: none"> • ABC • Kanban rules and calculations • Just-in-time single piece flow • Push and pull systems • Customer demand rated production • Lead time management

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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Skill Code	PRE-MPI-4008-1	Skill Category	Manufacturing Productivity and Innovation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Continuous Improvement		
Skill Description	This skill describes the ability to manage, implement and facilitate an organisation's systems and processes relating to continuous improvement. It also includes application of the organisation's systems and processes to the workplace.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Identification of improvement opportunities • Direct continuous improvement activities • Management of systems and processes to facilitate continued improvement • Monitoring and evaluation of improvement processes 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage and implement continuous improvement systems • Promote team support, and coach team members, toward continuous improvement • Gather, access and record production information to track improvement • Analyse, synthesise and interpret information • Design and apply improvement tools and strategies • Monitor and evaluate improvement processes • Identify improvement opportunities • Discuss and direct continuous improvement activities • Manage systems and processes to facilitate continued improvement • Monitor and evaluate improvement processes 		
Innovation and Value Creation	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate, identify and introduce innovative improvement opportunities 		

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<p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>to meet organisational goals</p> <ul style="list-style-type: none"> • Identify improvement activities associated with concepts of process management and improving customer satisfaction
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Discuss and direct continuous improvement activities with teams to improve customer satisfaction
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Update knowledge and skills in monitoring and evaluating improvement processes to achieve the goals set by the organisation
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Tools and equipment must include:</p> <ul style="list-style-type: none"> • Continuous Improvement tools and techniques • Communication and information technology, e.g. email, Internet, TQM tools • Work-related documents and texts; • Precision measuring equipment and tools <p>Regulations must include:</p> <ul style="list-style-type: none"> • ISO 14000 (Environmental) • ISO 9000 (Quality) • Workplace Safety and Health requirements • Relevant Singapore Government legislation, regulations, guidelines and procedures • Organisational policies and procedures

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Procedures and supporting documents must include:

- Organisational policies and procedures
- Liaising and communicating with colleagues, teams, supervisors, managers, QA, continuous improvement personnel, internal and external consultants and experts

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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Skill Code	PRE-MPI-4010-1	Skill Category	Manufacturing Productivity and Innovation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Contribute to Innovation Process within own Scope of Work in Business Unit		
Skill Description	This skills describes the ability to identify opportunities for innovation and improved work practices within own scope of work. It includes collaborating with stakeholders, pilot testing of ideas and supporting implementation of innovation initiatives.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Broad concepts of innovation • Steps in innovation process • Behaviours that support innovation • Individual role in contributing to innovation culture 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Present ideas to relevant stakeholders for feedback to improve ideas and develop possible variations • Assist in pilot testing or prototyping to determine effectiveness of innovation initiatives within a business unit • Support implementation of innovation initiatives in a business unit in accordance with innovation strategies 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse work systems and processes to identify opportunities for innovation and improved work practices within own scope of work 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> Assess emotional states of individuals and respond appropriately to emotional cues when collaborating with others on innovation initiatives
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> Collaborate with others to identify, discuss and develop effective ways of working
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-MPI-4011-1	Skill Category	Manufacturing Productivity and Innovation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Innovation in the Business Function		
Skill Description	This skill describes the ability to develop and implement innovation initiatives in a business function. It includes identifying opportunities for innovation, conducting pilot testing and refining innovation strategies and making recommendations for implementation with the support from various stakeholders.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Characteristics of business functions that are more likely to be open to innovation • Characteristics of broader environments that support and encourage innovation • Creative approaches to identify innovation opportunities • Range of creative techniques to generate innovative ideas 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate business function performance to identify opportunities for innovation and improvement • Create opportunities to maximise innovation within a business function • Support and guide employees to contribute to the implementation of organisational innovation strategies • Conduct pilot testing or prototyping of innovation concepts within business function to determine feasibility of innovation initiative • Make recommendations of innovation initiatives to relevant stakeholders for implementation 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Develop and refine innovative initiatives to ensure achievement of desired business outcomes within a business function 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Consult with relevant stakeholders to agree on broad parameters for developing innovation initiatives • Demonstrate empathy by acknowledging and addressing the feelings and perspectives of employees arising from the impact of innovation implementation
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Keep oneself updated on innovation management by subscribing to diverse learning channels and participating in peer discussion platforms
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-SCL-4001-1	Skill Category	Supply Chain and Logistics Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage a Supply Chain		
Skill Description	This skill describes the ability to manage a supply chain, including the relationships between an organisation and its supply and demand partners along the chain. It covers implementing a demand-driven supply chain management strategy, managing the supply chain, and evaluating and improving supply chain effectiveness.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	The ability to understand: <ul style="list-style-type: none"> • Legislation, codes of practice and national and international standards • Organisation policies and procedures related to supply chain management, purchasing and contracting and tendering • Business terms and conditions for purchasing, tendering and contracting • Product knowledge related to goods and services required by the organisation • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	The ability to: <ul style="list-style-type: none"> • Implement demand-driven supply chain management strategy • Determine demand at each level of the supply chain in accordance with the supply chain strategy • Implement contingency plans for unplanned events that may arise during the implementation and management of the supply chain 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	The ability to: <ul style="list-style-type: none"> • Identify and adjust policies and procedures to respond to the changing needs of customers, supply chain and the organisation • Evaluate and improve supply chain effectiveness 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Provide support to staff, customers and supply chain to assist in the implementation of the supply chain management strategy
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-SCL-4002-1	Skill Category	Supply Chain and Logistics Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Logistics Planning and Process		
Skill Description	This skill describes the ability to implement, monitor and manage the organisation's logistics planning and process. It also includes planning an efficient logistics operation, developing a contingency management strategy, producing operational schedules, and monitoring and coordinating systems for logistics operations.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Problems that may arise with logistic operations and strategies for dealing with them • Principles of supply chain management • Organisational policies including procedures for outsourcing operations and engaging additional resources 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Implement a work plan for efficient logistics operation • Adhere to contingency management strategy in accordance with organisational requirements • Produce operation schedules for logistics • Check outcomes against planned objectives to ensure all requirements are met • Identify non-compliance with quality standards, planned processes or regulatory requirements and initiate appropriate action Monitor and coordinate systems for logistics operations 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Act on customer concerns and suggestions for improvements 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-SCL-4003-1	Skill Category	Supply Chain and Logistics Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Procurement and Inventory		
Skill Description	This skill describes the ability to design and manage processes and control systems of the in-bound supply chain. It also includes the ability to analyse, plan, manage and develop the core processes of procurement and inventory management as a business function for the organisation.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Procurement strategies • Classification of product and materials • Sourcing strategies and vendor selection • Design and improvement of supplier or buyer relationships • Re-order policies • Software tools for procurement and inventory management 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify the basic strategies, processes and organisational concepts of procurement and inventory management • Select the optimal supplier according to different requirements and defining the right structure of the supply network • Assess and manage the risks of uncertain demand and supply 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review and improve the coordination processes continuously 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Use best practice solutions and state-of-the-art coordinating methods between the participants of the supply chain
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-QMS-4001-1	Skill Category	Quality Management Systems
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Quality Systems and Processes		
Skill Description	This skill describes the ability to acquire the knowledge and skills in managing customer expectations, monitoring the cost of quality and ensuring work processes are performed in an acceptable manner using statistical techniques. It also includes an understanding of national and/or international standards on quality management and quality services adopted by organisations.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	The ability to understand: <ul style="list-style-type: none"> • National or international quality standards • Workplace quality system requirements • Scopes of quality system and processes • Customer expectations • Dimension of quality • Costs of quality • Communication means • Use of statistical process control tools for measuring and tracking of quality performance • Quality issues resolution process 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	The ability to: <ul style="list-style-type: none"> • Determine the quality system requirements at the workplace based on the adopted national or international quality standards • Gather data on customer's expectations on quality aspects of products or services in accordance with organisational established dimensions of quality • Perform statistical evaluation on the work processes related to products or services quality performance using appropriate measurement and statistical analysis • Disseminate outcomes of statistical evaluation to relevant stakeholders within the organisation for decision-making • Plan quality cost saving or improvement activities to manage costs of quality at the workplace in accordance with organisational procedures • Track the quality performance of the products or services in accordance with organisational quality system requirements 		

**SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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	<ul style="list-style-type: none"> • Resolve issues associated with non-conformance of quality standards in accordance with organisational procedures • Prepare reports on quality performance of the products or services to fulfil the quality system requirements in accordance with organisational procedures
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Conduct costs of quality analysis related to the products or services and identify areas for improvement in accordance with organisational quality system requirements
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Communicate customer's expectations on quality aspects of products or services to relevant stakeholders within the organisation in accordance with organisational procedures • Lead and manage co-workers or staff to achieve the desired results on costs of quality at the workplace
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	N/A
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the</i></p>	<p>National or international quality standards must include:</p> <ul style="list-style-type: none"> • ISO 9001:2008 QMS • TS/ISO 16949

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<i>critical circumstances and contexts that the skill may be demonstrated.</i>	<ul style="list-style-type: none">• ISO 14001:2004 EMS
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SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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Skill Code	PRE-WSH-4007-1	Skill Category	Workplace Safety and Health
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Support Workplace Safety and Health Risk Management		
Skill Description	This skill describes the ability to coordinate shop floor operations to facilitate workplace safety and health professionals' work in carrying out safety inspections, implementing control measures and evaluating their effectiveness.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Workplace Safety and Health (WSH) management programmes • Elements of WSH management systems • Applicable WSH legal and other requirements • Means of obtaining updates on amended or new WSH legal requirements • Workplace communication channels • Causes and types of lapses in WSH control measures • Methods for monitoring risk control measures 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Coordinate work operations to facilitate WSH inspections, implementation and evaluation of corrective measures • Provide feedback for formulation of WSH risk management • Coordinate data collection and reporting for monitoring the implementation and evaluation of risk control measures to relevant stakeholders • Maintain WSH-related documentation across operational processes 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Communicate legal compliance requirements
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Coordinate work operations must include:</p> <ul style="list-style-type: none"> • Arranging work schedules • Ensuring availability of personnel during inspections and reviews • Informing personnel on additional roles during inspections and reviews <p>Data collection and reporting for WSH monitoring must include:</p> <ul style="list-style-type: none"> • Tracking of action items status • Feedback session • Review meeting • Feedback from observation <p>Communicate legal compliance requirements must include:</p> <ul style="list-style-type: none"> • New WSH requirements, • Changes to operations for WSH

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	<ul style="list-style-type: none">• Safety education for workers
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Skill Code	PRE-WSH-4006-1	Skill Category	Workplace Safety and Health
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Workplace Safety and Health Systems		
Skill Description	This skill describes the ability to apply Workplace Safety and Health (WSH) procedures and practices to ensure the safety of the production teams. It also includes ensuring compliance with standards and managing the identification of hazards and assessment of risks.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Organisational policies and procedures relating to Workplace Safety and Health (WSH) • Personal Protective Equipment (PPE) • Safety signs and symbols • Industry Codes of Practice (CP) and Singapore Standards (SS) • Rules and regulations • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage the day-to-day performance of WSH activities • Ensure that work is carried out safely, in accordance with organisational procedures and legislative requirements • Identify and manage workplace hazards • Ensure compliance to workplace procedures for risk control measures • Manage and supervise programmes to ensure emergency equipment is identified, available and maintained • Oversee incident reporting, in accordance with organisational procedures and legislative requirements 		
Innovation and Value Creation <i>It refers to the ability to generate</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Propose improvements to organisational WSH procedures to enhance the organisation's ability to comply with regulatory requirements 		

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<i>purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Communicate WSH procedures and risk control measures to the production teams
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Identify appropriate training for production teams, in accordance with organisational and regulatory requirements • Keep abreast of changes to WSH regulations and other regulatory requirements through legislative forum sharing
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Industry Codes of Practice (CP) and Singapore Standards (SS) must include: <ul style="list-style-type: none"> • CP for safety in welding and cutting (and other operations involving the use of heat) • CP for selection, use and maintenance of respiratory protective devices • CP for selection, use, care and maintenance of hearing protectors • SS 217, Specification for industrial safety signs • SS 473, Specification for personal eye-protectors – Part 1: General requirements • SS 473, Specification for personal eye-protectors – Part 2: Selection, use and maintenance • CP 98, Material Safety Data Sheet (Safety Data Sheet)

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Rules and regulations must include:

- Workplace Safety and Health Act
- Environmental Management Act
- ISO 14000

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Skill Code	PRE-BAN-4002-1	Skill Category	Business Analytics
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Apply Data Visualisation		
Skill Description	This skill describes the ability to develop data visualisation to frame insights. It also includes understanding the purpose and key factors of the data visualisation, identifying the relevant techniques to frame the insights or stories to the audience.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Different types of data visualisation techniques and the types of data suitable for using the techniques • Visual analysis to gather insights or stories • Data visualisation tools • Anatomy of a data visualisation • Visualisation design methodology and process 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify key factors that may affect the success of data visualisation • Access the data to be visualised based on volume, cardinality, velocity and variety • Develop data visualisation that will frame insights 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Gather insights or stories using relevant data visualisation techniques
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Data visualisation techniques must include: <ul style="list-style-type: none"> • Line charts • Word cloud • Network diagram • Bar charts • Scatter plots • Pie charts • Co-relation matrix • Map frequency chart

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Skill Code	PRE-BAN-4001-1	Skill Category	Business Analytics
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Solve Problems using Operations Research Techniques		
Skill Description	This skill describes the ability to create a mathematical model to represent the business problem and identify solutions. It also includes reviewing of the solution regularly to ensure it remains valid.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Operations research techniques • Operations research tools • Common issues and constraints related to optimisation • Operations research or optimisation procedures and routines 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify and formulate the problem with the relevant parties • Construct a mathematical model to represent the problem using operations research techniques • Test the mathematical model to ensure that it is tractable and valid • Identify the solution using operations research tools and decision makers • Implement solutions and new processes to the relevant parties 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review solutions regularly to ensure that the solutions remain valid in the changing environment 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Operations research techniques must include:</p> <ul style="list-style-type: none"> • Decision analysis • Optimisation modelling • Simulation • Statistical and stochastic modelling • Game theory <p>Operations research tools must include tools for:</p> <ul style="list-style-type: none"> • Optimisation • Production planning • Inventory management • Revenue management

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Skill Code	BM-BN-401E-1	Skill Category	Business Negotiation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Participate in Negotiations		
Skill Description	This skill describes the ability to participate in negotiations. It also includes preparing alternatives and outcomes to support negotiation objectives, applying communication and conflict resolution techniques during negotiation, taking follow-up actions to close negotiation, as well as evaluating negotiation outcomes to identify areas of improvement.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Components of negotiation plans • Negotiation roles and responsibilities • Negotiation processes and techniques • Relevant precedents • Relevant legislation and regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Plan and prepare alternatives and outcomes for both parties in negotiations to support negotiation objectives • Apply communication and conflict resolution techniques to achieve desired negotiation outcomes • Finalise negotiation and take necessary follow-up actions to close negotiation • Monitor and evaluate negotiation outcomes against objectives in accordance with organisational procedures to determine potential areas of improvement for future negotiations 		
Innovation and Value Creation <i>It refers to the ability</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities to strive for negotiation outcomes that adds value 		

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<p><i>to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>to the business and achieves a win-win for both parties</p>
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage self to maintain composure and self-confidence when conducting negotiations
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Study past dispute resolutions to identify best practices that may be applied to the current negotiation situation
<p>Range of Application (where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Relevant legislation and regulations may relate to:</p> <ul style="list-style-type: none"> • Billing policies • Organisational human resources policies • Financial regulations and policies • Employment Act • Industrial Relations Act • Workplace Safety and Health Act • Employment of Foreign Manpower Act • International legislation

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Skill Code	BM-BN-402E-1	Skill Category	Business Negotiation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Participate in Dispute Resolution		
Skill Description	This skill describes the ability to prepare and participate in dispute resolution to reach agreeable outcomes.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Types of disputes • Evidence to support case • Communication and conflict resolution techniques • Relevant precedents • Relevant legislation and regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Prepare case to gather support for position • Participate in dispute resolution processes to achieve desired dispute resolution outcomes • Reach dispute resolution outcomes to obtain concurrence from both parties 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities to strive for negotiation outcomes to add value to the organisation and achieves a win-win outcome for both parties 		

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<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage self to maintain composure, self-confidence and resilience when dealing with challenges in the conflict resolution process
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Engage in self-reflection to identify areas for improvement in managing dispute resolution process • Improve own conflict resolution skills by seeking feedback from peers and supervisors to enhance own capability in managing conflicts
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Relevant legislation and regulations must include:</p> <ul style="list-style-type: none"> • Billing policies • Organisational human resources policies • Financial regulations and policies • Employment Act • Industrial Relations Act • Workplace Safety and Health Act • Employment of Foreign Manpower Act • International legislation

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Skill Code	BM-COM-303E-1	Skill Category	Communications
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Present Information		
Skill Description	This skill describes the ability to present information in various formats to achieve presentation objectives. It also includes preparing, conducting and evaluating presentations to determine areas for improvements.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Factors for consideration when selecting presentation formats • Sources of necessary information • Criteria for organising information • Presentation techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify presentation objectives and presentation formats in accordance with organisational procedures • Gather and analyse necessary information to support presentation objectives • Develop presentations and presentation collaterals, if necessary, to support presentation structure • Present information in appropriate presentation formats to achieve presentation objectives 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate presentations to determine areas of improvement 		

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<i>to organisational goals.</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Assess reactions of target audience towards the presentations to respond appropriately to address their concerns
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Seek guidance and advice from peers and supervisors on past presentations to gain insights to plan the presentation
Range of Application <i>(where applicable)</i> <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Presentation formats may be verbal or written and must include: <ul style="list-style-type: none"> • Reports • Face-to-face presentations • Audio • Videos • Posters • Exhibits • Models • Performances • Demonstrations

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Skill Code	BM-COM-304E-1	Skill Category	Communications
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Write Reports		
Skill Description	This skill describes the ability to write reports for submission. It also includes identifying the objectives and structure of the reports, drafting and proofreading, and seeking feedback to improve the reports.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	The ability to understand: <ul style="list-style-type: none"> • Types of reports • Sections of a report • Report writing techniques • Elements of a well-written report • Methods of displaying data 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	The ability to: <ul style="list-style-type: none"> • Identify objectives of report in accordance with organisational procedures to meet organisational requirements • Consult relevant stakeholders to outline and structure reports • Draft reports to effectively convey information to readers • Proofread reports to minimise errors • Submit reports to relevant stakeholders for their necessary action 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i>	The ability to: <ul style="list-style-type: none"> • Seek feedback from relevant stakeholders to determine areas of improvement 		

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<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Adhere to organisational code of conduct, values and ethics when writing reports to ensure quality and integrity
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Engage in self-reflection to identify own areas for improvement in report writing • Improve own report writing techniques by subscribing to learning channels to enhance own report writing skills for workplace application
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	BM-COM-402E-1	Skill Category	Communications
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Meetings		
Skill Description	This skill describes the ability to manage meetings to meet meeting objectives. It also includes preparing for the meetings, conducting the meetings and following-up on meetings, as well as evaluating meeting outcomes to ascertain areas for improvement.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Types and modes of meetings • Components of meeting agendas • Meeting collaterals • Legal, regulatory, ethical and socio-cultural constraints of meetings 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Prepare for meetings to support meeting objectives • Follow up on meetings in accordance with organisational procedures to ensure matters arising from the meetings are addressed 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate meeting outcomes to determine areas of improvement 		

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<i>to organisational goals.</i>	
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Conduct meetings to facilitate discussion and conflict resolution, taking into consideration the emotional states of meeting participants and responding appropriately to emotional cues to maintain positive working relationships
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Engage in self-reflection to identify areas for improvement in managing meetings • Improve own effectiveness in managing meetings by subscribing to diverse learning channels and participating in peer review platforms to enhance workplace performance
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Legal, regulatory, ethical and socio-cultural constraints of meetings must include:</p> <ul style="list-style-type: none"> • Relevant legislations • Codes of practice • Business ethics • Policies and guidelines • Social responsibilities • Cultural and societal expectations and influences

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Skill Code	BM-AC-303E-1	Skill Category	Accounting
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Apply Knowledge of Accounting-Related Concepts		
Skill Description	This skill describes the ability to apply knowledge of accounting and accounting concepts. It includes maintaining a general ledger and preparing basic financial statements.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Accounting terminology • Components of a general ledger • Objectives and underlying assumptions of financial statements • Accounting policies used in the compilation of financial statements • Components of income statements, balance sheet statements and cash flow statements • Balance sheet date adjustments • Considerations in using financial reporting standards to prepare financial statements • Rationale of conducting audits 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Apply knowledge of accounting and accounting concepts to understand implications on organisation's finances • Maintain a general ledger in accordance with sound bookkeeping practices to provide information on financial transactions and position • Prepare basic financial statements in consultation with relevant stakeholders to provide information on financial position and performance 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities to leverage on new financial software to enhance efficiency in preparing basic financial statements 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when preparing basic financial statements to ensure fair and accurate reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Keep abreast of accounting-related concepts and regulatory requirements by subscribing to diverse information channels to ensure organisational adherence to the latest concepts and requirements
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Financial reporting standards must include: <ul style="list-style-type: none"> • International Financial Reporting Standards (IFRS) • Financial Reporting Standards (FRS), as issued by the Accounting Standards Council (ASC) • Internal financial reporting standards

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Skill Code	BM-FIN-305E-1	Skill Category	Accounting
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Prepare Cash Flow Report for the Business Unit		
Skill Description	The skill describes the ability to consolidate data to prepare cash flow reports for the business unit. It includes gathering and consolidating data on cash transactions, verifying and reconciling transactions as well as generating and submitting cash flow reports to stakeholders for review.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Differences between cash flow reports and income statements • Objectives of cash flow reports • Sources of data needed in a cash flow report 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Gather and consolidate data on cash inflow and outflow transactions • Verify and reconcile transactions against financial records to ensure accuracy of the cash flow report • Generate cash flow reports to determine cash position of the business unit • Submit cash flow reports to relevant stakeholders for review in accordance with organisational policies and procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities for technological optimisation to enhance efficiency of the cash flow report preparation process 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when preparing cash flow reports for the business unit to ensure fair and accurate reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Improve own competency in preparing cash flow reports by subscribing to learning channels to enhance workplace performance
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-FIN-403E-1	Skill Category	Finance
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Budgeting and Forecasting Processes for the Business Unit		
Skill Description	This skill describes the ability to prepare and analyse financial forecasts with a view to managing budgets. It also includes preparing, managing and monitoring budgets and outcomes for review and approval.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Methods of analysing budget history and trends for business unit • Methods to forecast revenue, expenses and balance sheet for business unit • Considerations of conducting scenario analysis • Forecasting techniques • Types of budget controls and their purposes <p>Means to monitor financial operation of business unit against budget outcomes</p> <ul style="list-style-type: none"> • Verifiable financial evidences of organisation • Need for verifiable financial evidences in budget planning and forecasting • Processes in communicating budget plans and performance to relevant stakeholders for endorsement 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review organisational needs and market conditions to recommend parameters and assumptions for budget planning • Prepare and analyse financial forecasts to facilitate financial and business planning • Implement budget plans to manage resource allocation to business activities • Manage budget to enable the actual financial operation of organisation to be measured against forecast • Monitor budget outcomes to ensure that resources are used for their intended purposes and are properly accounted for in consultation with relevant stakeholders • Present financial forecasts, budgets and budget outcomes to immediate supervisors for review and approval 		

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review opportunities for technological optimisation to enhance efficiency of the budgeting and forecasting processes for the business unit
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when managing budgeting and forecasting processes for the business unit to ensure fair and accurate reporting
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Keep abreast of internal and external factors to determine impact on budget preparation by subscribing to diverse information channels and participating in discussion platforms with supervisors and peers
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
SKILLS STANDARDS FOR
PRODUCTION SUPERVISOR

Skill Code	BM-FIN-406E-1	Skill Category	Finance
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Monitor Cash Flow Reports		
Skill Description	This skill describes the ability to monitor cash flow reports. It includes projecting, reviewing and presenting cash flow reports for a business unit to management.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Cash flow projections and impact on management of cash flow • Cash flow assumptions • Potential issues identified from cash flow reports and recommendations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Project cash inflows and outflows for the business unit to better prepare for contingencies • Present findings to management for review in accordance with organisational policies and procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review cash flow reports for the business unit to identify items that may impact cash flow management and optimise allocation of cash flow 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when monitoring cash flow reports to ensure fair and accurate reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Continually re-visit assumptions made to ensure currency and relevancy of cash flow projections
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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PRODUCTION SUPERVISOR

Skill Code	BM-FIN-407E-1	Skill Category	Finance
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Conduct Financial Analysis of the Business Unit		
Skill Description	The skill describes the ability to evaluate financial statements and review financial analysis ratios. This includes analysing the financial implications, reporting findings, and performing cost-benefit analysis and to present the findings to management.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Objectives of financial analysis • Considerations in interpreting financial analysis ratios • Implications of financial analysis ratios on organisational strategies and budgeting process • Common limitations impacting financial analysis • Limitations of ratio analysis • Limitations of using financial statements • Evaluation criteria for financial analysis 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate financial statements in accordance with relevant reporting requirements • Analyse short-term and long-term financial implications of the business unit to facilitate making of business decisions • Perform cost-benefit analysis to evaluate the financial impact of business decisions • Present financial analysis to management for review in accordance with organisational policies and procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review opportunities for technological optimisation to enhance efficiency in conducting financial analysis for the business unit 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when conducting financial analysis to ensure fair and accurate reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • • Keep abreast of the latest legislative and regulatory requirements related to financial reporting by subscribing to various information channels to ensure currency of knowledge and organisational compliance
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Reporting requirements must relate to: <ul style="list-style-type: none"> • Singapore Financial Reporting Standards • Inland Revenue Authority of Singapore (IRAS) • Accounting and Corporate Regulatory Authority of Singapore (ACRA) • Singapore Companies Act

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Skill Code	BM-FIN-407E-1	Skill Category	Finance
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Conduct Financial Analysis of the Business Unit		
Skill Description	The skill describes the ability to evaluate financial statements and review financial analysis ratios. This includes analysing the financial implications, reporting findings, and performing cost-benefit analysis and to present the findings to management.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	The ability to understand: <ul style="list-style-type: none"> • Objectives of financial analysis • Considerations in interpreting financial analysis ratios • Implications of financial analysis ratios on organisational strategies and budgeting process • Common limitations impacting financial analysis • Limitations of ratio analysis • Limitations of using financial statements • Evaluation criteria for financial analysis 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	The ability to: <ul style="list-style-type: none"> • Evaluate financial statements in accordance with relevant reporting requirements • Analyse short-term and long-term financial implications of the business unit to facilitate making of business decisions • Perform cost-benefit analysis to evaluate the financial impact of business decisions • Present financial analysis to management for review in accordance with organisational policies and procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	The ability to: <ul style="list-style-type: none"> • Review opportunities for technological optimisation to enhance efficiency in conducting financial analysis for the business unit 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational and professional code of conduct, values and ethics when conducting financial analysis to ensure fair and accurate reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Keep abreast of the latest legislative and regulatory requirements related to financial reporting by subscribing to various information channels to ensure currency of knowledge and organisational compliance
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Reporting requirements must relate to: <ul style="list-style-type: none"> • Singapore Financial Reporting Standards • Inland Revenue Authority of Singapore (IRAS) • Accounting and Corporate Regulatory Authority of Singapore (ACRA) • Singapore Companies Act

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Skill Code	PRE-HRM-4001-1	Skill Category	Human Resource Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Support Individual Learning and Development		
Skill Description	This skill describes the ability to support employees to achieve their personal learning and development goals. It also includes facilitating the communication of learning and development objectives and process with line managers, facilitating a learning needs analysis, developing a training calendar and learning roadmap, and reviewing individual plans with line managers.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Scope and process of learning needs analysis • Components of learning needs analysis report • Types of learning styles • Components of a learning roadmap • Types of learning and development needs of an individual • Factors influencing an individual's level of learning motivation and choice • Evaluation measures of learning and development goals and objectives 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Facilitate a learning needs analysis to identify individual learning needs • Develop a training calendar to convey available learning and development options to individual learners • Facilitate process of learning and development with line managers and employees to identify individual learning and development goals 		
Innovation and Value Creation <i>It refers to the ability to generate</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review individual plans with line managers to measure effectiveness of learning support provided and identify areas of improvement 		

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<i>purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Facilitate the communication of organisational learning and development objectives to individuals
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	PRE-HRM-4002-1	Skill Category	Human Resource Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Employee Relations		
Skill Description	This skill describes the ability to manage employee relations arising within the organisation. It also includes reviewing communication channels, identifying opportunities and concerns in employee relations, analysing the nature of conflicts, grievances and disputes, investigating breaches of discipline, and supporting the implementation of resolution strategies.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Objectives of employee relations • Implications of legal, ethical and socio-cultural constraints on employee engagement • Communication channels • Communication techniques • Ways in which employees can give feedback and make suggestions • Causes of conflict, grievance and dispute • Investigation procedures • Resolution techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review channels regularly to make sure there are sufficient channels for employee feedback • Analyse the nature and source of conflicts, grievances and disputes to determine relevant actions to be undertaken • Investigate breaches of discipline using established procedures to recommend resolution steps • Support implementation of resolution strategies in accordance with organisational policies and procedures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities and concerns in employee relations to understand ground sentiments 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Legal, ethical and socio-cultural constraints must include:</p> <ul style="list-style-type: none"> • Relevant legislation, which may include <ul style="list-style-type: none"> ○ Employment Act ○ Workplace Safety and Health Act ○ Retirement Age Act (Re-employment Act) ○ Workmen's Compensation Act ○ Criminal Law (Temporary Provisions) Act ○ Children Development and Co-savings Benefits Act, which includes provisions relating to maternity leave ○ Industrial Relations Act • Codes of practice • Business ethics • Policies and guidelines • Regulations • Social responsibilities • Cultural and societal expectations and influences

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Skill Code	PRE-ICT-5002-1	Skill Category	Info-Communication Technologies
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Produce Advanced Spreadsheet Outputs using Spreadsheet Applications		
Skill Description	This skill describes the ability to use spreadsheet applications to produce advanced spreadsheet outputs for management reports. It also includes in-depth knowledge of MS Excel, including its features.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Formatting of cells and worksheets • Functions and formulas • Charts • Analyses with tables, sorting and filtering 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Apply advanced formatting options in handling worksheets • Use functions associated with logical, statistical, financial and mathematical operations • Create charts and apply advanced chart formatting features • Work with tables and lists to analyse, filter and sort data • Use linking, embedding and importing features to integrate data 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Enhance productivity by working with named cell ranges, macros and templates 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Validate and audit spreadsheet data • Collaborate on and review spreadsheets with key stakeholders
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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Skill Code	PRE-IPR-5001-1	Skill Category	Intellectual Property
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Apply Basic Knowledge of Intellectual Property (IP) to support IP-related Organisational Procedures		
Skill Description	This skill describes the ability to analyse the various types of Intellectual Property (IP) supporting organisational procedures and applying IP knowledge to support implementation of IP registration procedures Singapore.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Definition of Intellectual Property (IP) • Types of IP • Sources from which information about IP can be obtained • Registration procedures of various types of IP in Singapore 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse various types of IP in accordance with organisational procedures • Collate necessary IP-related materials for IP applications • Support organisational procedures, in collaboration with appropriate IP experts • Apply IP knowledge to support implementation of IP registration procedures in Singapore 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Implement organisational IP-review processes 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Types of IP must include: <ul style="list-style-type: none"> • Copyrights • Registered and unregistered trade marks (including certification marks, and a consideration of domain names and company/business names) • Patents, which may include software • Trade secrets and confidential information • Registered designs • Plant varieties • Geographical indications • Layout-design of integrated circuits

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Skill Code	BM-PM-401E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Conduct Project Feasibility Study		
Skill Description	This skill describes the ability to conduct project feasibility study. It includes assessing the business environment and organisational capabilities, preparing financial projections, reviewing project feasibility assessment as well as reporting findings to relevant stakeholders.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Tools to evaluate business environment • Impacts of project feasibility studies on assessment process • Methods to use and prepare assessment models • Key cost-benefit indicators • Assumptions of financial models • Components of feasibility study reports • Measures of project benefits and outcomes 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Assess the business environment to determine potential challenges faced • Assess organisational capabilities to assist in project feasibility determination • Prepare financial projections to facilitate project feasibility assessment • Report findings to relevant stakeholders in accordance with organisational procedures to ensure stakeholders are updated and consulted 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek feedback from supervisors to review project feasibility assessment and identify areas for improvement 		

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PRODUCTION SUPERVISOR

<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Adhere to organisational code of conduct, values and ethics when conducting project feasibility study to ensure fair and accurate assessment and reporting
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Improve own capability in conducting project feasibility study by subscribing to diverse learning channels to enhance workplace performance
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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PRODUCTION SUPERVISOR

Skill Code	BM-PM-403E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Team		
Skill Description	This skill describes the ability to manage and evaluate a team's performance in the execution of a project. This involves an understanding of team dynamics and conflict resolution techniques.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Organisational processes and procedures pertaining to project management • Methods of learning and training • Principles of team dynamics • Methods of conflict resolution • Conflict resolution techniques • Methods of developing team cohesion • Human resources management techniques and tools • Communication techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Monitor and evaluate team performance in accordance with performance measures 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Communicate information to team members in accordance with organisational and project requirements • Monitor and manage team dynamics to ensure effective execution of project
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Implement training and development for project team to meet project specifications
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-405E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Resources		
Skill Description	This skill describes the ability to allocate, monitor and re-allocate project resources in accordance with project requirements. This involves an understanding of cost management and estimation techniques.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Standard project organisation and structure • Human resources management techniques and tools • Cost management and estimation techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine resource needs in accordance with project requirements • Acquire and allocate project resources through various organisational channels • Re-allocate resources where applicable to meet project requirements 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Monitor and review resource usage to ensure effective execution of project 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-406E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Procurement		
Skill Description	This skill describes the ability to develop a procurement plan based on the projects' needs. This includes managing procurement activities and ensuring adherence to legal to organisational requirements.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Relevant stakeholders • Negotiation techniques • Process of developing project procurement specifications 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Develop procurement plan based on project procurement needs • Utilise procurement processes to ensure adherence to legal and organisational requirements • Manage suppliers / vendors to ensure delivery of products / services specified in procurement documentation • Manage procurement activities to minimise risk 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine processes for monitoring and evaluating procurement related to the project 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Negotiate with suppliers / vendors to clarify expectations and terms and conditions • Communicate procurement arrangements to key stakeholders
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-407E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Costs		
Skill Description	This skill describes the ability to manage and monitor project costs to ensure organisational objectives are achieved. This includes having an understanding of cost management and estimation techniques.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Cost management and estimation techniques • Triple constraints and their impact on project management • Methods to measure costs • Potential cost management issues 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Develop project budget in accordance with project specifications and organisational costing policies • Monitor project costs to ensure project objectives are achieved throughout the project life cycle • Manage project costs to ensure organisational objectives are achieved 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

**SKILLS FRAMEWORK FOR PRECISION ENGINEERING
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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Communicate cost management plans
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-408E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Timeline		
Skill Description	This skill describes the ability to manage a project schedule to ensure project objectives are met. This involves understanding project constraints and the use of time management techniques.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Time management techniques and issues • Triple constraints and their impact on project management 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Assess project time constraints in order to sequence tasks accordingly • Develop project schedule to guide time management of the project • Implement and manage project schedule to ensure project objectives are met within the stipulated time frame 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Liaise with stakeholders on project schedule • Ensure team members and stakeholders are clear on project objectives, deliverables and deadlines
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Incorporate past experience when developing project schedule
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-409E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Quality		
Skill Description	This skill describes the ability to develop a quality management plan using quality management methods, tools and techniques. This includes evaluating and approving project deliverables and identifying opportunities to improve project quality.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Objectives of quality management • Quality management methods, tools and techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine project quality assurance needs in accordance with project specifications and organisational quality management policies • Develop quality management plan to define acceptable level of quality for project deliverables • Establish and implement quality assurance processes to meet organisational guidelines and policies • Evaluate and approve project deliverables in accordance with project requirements 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify opportunities to improve project quality 		

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<i>improve work performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Seek stakeholders endorsement on quality criteria and requirements • Communicate quality issues and outcomes to stakeholders
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-410E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Risk		
Skill Description	This skill describes the ability to monitor and control project risks. This involves understanding the risk management framework and internal and external factors that may affect a project plan.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Principles and objectives of risk and risk analysis • Risk management framework • Methods to perform basic risk assessment • Methods to report risk assessment findings to management • Internal and external factors that may affect project plan 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify and analyse project risks in accordance with organisational risk policies • Monitor and control project risks to develop scenarios for variances and risk management plan 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	N/A		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Recommend follow-up actions to relevant stakeholders
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Monitor risks continually to respond to changes
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-412E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Conduct Project After-action Review		
Skill Description	This skill describes the ability to conduct project after-action review (AAR). It includes determining need for an AAR, facilitating AAR discussions, documenting AAR and applying key learning points for future projects.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Importance and objectives of an AAR • Potential project management issues • Components of AAR documentation templates • Communication techniques 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine need to conduct an AAR following project activity or event • Document AAR to ensure that key learning and discussion points are captured 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Follow-up on key points to apply in future projects 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	The ability to: <ul style="list-style-type: none"> • Demonstrate empathy and openness to feedback to facilitate discussion to assess project management outcomes
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Improve own capability in conducting AAR by subscribing to diverse learning channels and discussion platforms to enhance workplace performance
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	BM-PM-402E-1	Skill Category	Project Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill Title	Manage Project Scope		
Skill Description	<p>This skill describes the ability determine project deliverables and key work activities as well as monitor and control project scope to meet project objectives. It also includes identifying and resolving issues related to the project scope and recommending ways to enhance project deliverables and key work activities.</p>		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Relevant stakeholders • Scope management plan, processes and procedures • Project life cycle • Scope change control procedures • Components of project plans • Project management tools and techniques • Triple constraints and their impact on project management 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Determine project deliverables and key work activities aligned to project objectives and organisational guidelines / policies to define project scope • Identify and resolve potential project scope issues in accordance with organisational procedures to meet project objectives • Monitor and control project scope to meet project objectives 		
Innovation and Value Creation <i>It refers to the ability to generate</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Recommend ways to enhance project deliverables and changes to key work activities to add value to the organisation 		

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<p><i>purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Apply emotional intelligence to guide one's thinking and actions to communicate changes in project scope and seek acceptance from stakeholders to ensure individual concerns are addressed
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Engage in self-reflection to identify areas for improvement in managing project scope to enhance performance for managing new projects at the workplace
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Triple constraints may include the following constraints:</p> <ul style="list-style-type: none"> • Time • Scope • Cost

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Skill Code	BM-RM-303E-1	Skill Category	Risk Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Apply Risk Management Procedures		
Skill Description	This skill describes the ability to plan and apply risk management procedures. It also includes identifying, conducting, documenting and reviewing risk response activities.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Types of records of risk planning • Risk analysis processes • Types of records of risk management processes and outcomes • Components of risk management plans 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Assist with risk planning in consultation with relevant stakeholders to support organisational risk management • Identify, assess and determine possible risk response activities to support the risk management processes • Conduct risk response activities in accordance with risk management plans to meet organisational risk management objectives • Apply change management techniques to facilitate implementation of risk response activities • Document and track risk management outcomes according to information format requirements and present documentation to relevant stakeholders for review 		

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<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> Review risk response activities to determine the effectiveness of risk management plans and identify areas for improvement
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> Demonstrate openness to suggestions from stakeholders on risk management to maintain positive working relationships
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> Review reports on risk response activities initiated at past risk events to adapt for application in the current and future planning
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	PRE-SMA-4001-1	Skill Category	Sales and Marketing
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Understand Sales and Marketing in a Manufacturing Organisation		
Skill Description	This skill describes the ability to understand the concept of sales and marketing in a manufacturing organisation context. It also includes identification of opportunities for competitive advantage and understanding the marketing mix of the organisation.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Relevant industry and market practices and standards • Four marketing essential elements • Organisations' marketing plans and competitive advantages • Workplace Safety and Health regulations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify the organisation's current and emerging competitors • Determine the marketing mix, in relation to the organisation's targeted competitive advantage 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse the organisation's marketing plans to assess suitability in supporting the organisation's competitive advantage 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	The ability to: <ul style="list-style-type: none"> • Analyse data and emerging trends through market research to understand the organisation's market potential
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	Four marketing essential elements must include: <ul style="list-style-type: none"> • Product – brand, quality, product range, packaging, delivery and customer service • Place – warehousing, outlet location, type of outlet, wholesalers, retailers and franchisers • Price – product cost, wholesale price, retail price, guarantees, allowances, deals, discounts and delivery terms • Promotion – internal marketing, word of mouth, branding, public reaction, sales promotion, personal selling, direct marketing, sponsorship, exhibitions, merchandising, packaging, corporate image and advertising

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Skill Code	PRE-SPI-4002-1	Skill Category	Strategy Planning and Implementation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Understand Business Management		
Skill Description	This skill describes the ability to understand an organisation's business and management functions and issues. It also includes knowledge of management principles and organisational structures.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Classical management theories • Management principles • Japanese management principles • Organisational structures • Management functions in an organisation • Management issues in relation to productivity, quality, profitability and human relations 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Relate management principles to the organisation's business • Assess diverse organisational structures' suitability for manufacturing organisations • Correlate organisation functions in a typical manufacturing organisation with modern management practices 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse management issues in relation to productivity, quality, profitability and human relations in relation to the organisation's business 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	N/A
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	N/A
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Classical management theories must include:</p> <ul style="list-style-type: none"> • Fredrick W Taylor • Max Weber • Henri Fayol • Hawthorne Works Experiments <p>Japanese management styles must include:</p> <ul style="list-style-type: none"> • Kaizen • Poka Yoke • Kanban <p>Organisational structures must include:</p> <ul style="list-style-type: none"> • Tall • Flat • Hierarchical

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- Centralised
- De-centralised
- Matrix

Management functions in an organisation must include:

- Planning
- Organising
- Leading
- Resourcing
- Controlling
- Resourcing – personnel, finance, materials, facilities

Management issues in relation to productivity, quality, profitability and human relations must include:

- Leadership
- Motivation
- Team dynamics
- Industrial relations
- Use of technology
- Lean manufacturing
- Agile manufacturing

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Skill Code	PRE-SPI-4001-1	Skill Category	Strategy Planning and Implementation
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage and Review Systems and Processes		
Skill Description	This skill describes the ability to manage, review and evaluate systems and processes with a view for enhancements. It includes gathering of feedback and developing solutions to close gaps and to make improvements.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Different tiers of systems and processes within the organisation • Tools and methodologies to review systems and processes 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage systems and processes to meet organisational guidelines or policies 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Review and evaluate systems and processes in accordance with organisational policies to identify areas for improvement • Develop and establish solutions to gaps and areas of improvement to further enhance organisational systems and processes 		

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<i>performance and/or enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> Adhere to organisational code of conduct, values and ethics when managing and reviewing systems and processes to ensure continued efficiency of organisational business processes
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> Keep oneself updated on best practices in systems and processes from other organisations and countries by subscribing to diverse learning channels and participating in peer discussion platforms
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	N/A

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Skill Code	ES-PMD-403G-1	Skill Category	Personal Management and Development
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Apply Emotional Competence to Manage Self and Others in a Business Context		
Skill Description	This skill describes the ability to apply principles of Emotional Intelligence to manage oneself and others. It also includes being aware of the environment, expressing empathy, guiding others, upholding integrity and building bonds with others in a business context.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Differences between cognitive intelligence and Emotional Intelligence • Importance of Emotional Intelligence to a manager • Competencies related to Emotional Intelligence • Types of assessment tools and methods to assess own Emotional Intelligence and their features • Methods for development of own Emotional Intelligence and their features • Definition of a business context • Importance of assessing emotional climate in a business context • Ways that different cultures and backgrounds of others affect one's emotions • Benefits of applying Emotional Intelligence in a business context 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Assess own level of Emotional Intelligence in one's dealings and relationships with others in a business context and its effects on achieving organisational goals and objectives • Assess the emotional climate of the environment, recognise the emotional strengths and weaknesses of individuals and exercise flexibility and adaptability in dealing with them • Apply Emotional Intelligence to guide one's thinking and actions and to influence and persuade others to achieve a win-win outcome • Uphold integrity in all business dealings and take responsibility for what have been committed to others that are in alignment with organisational goals 		

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<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Initiate change and resolve disagreements in business
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Demonstrate empathy by acknowledging the feelings and perspectives of individuals in a business context, taking into consideration their culture, background and needs • Build bonds by nurturing instrumental relationships with others in a business context
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Examine own strengths and weaknesses for development of own Emotional Intelligence to work effectively with others in a business context to achieve organisational goals and objectives • Manage own emotions and maintain composure, self-confidence and resilience when dealing with challenges and setbacks
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>Cognitive Intelligence must include:</p> <ul style="list-style-type: none"> • Intellectual abilities such as logic, reason, reading, writing, analysing and prioritising <p>Emotional Intelligence must include:</p> <ul style="list-style-type: none"> • Awareness of own emotions and ability to regulate them • Awareness of the emotions of others and the ability to use the knowledge to manage interactions with others

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Competencies related to Emotional Intelligence must include:

- Recognising one's emotions and its effects
- Recognising strengths and weaknesses
- Confidence about self-worth and abilities
- Ability to manage disruptive impulses and emotions
- Upholding honesty and integrity
- Ownership for personal performance
- Adaptable to change
- Receptive to new and novel ideas
- Exercising empathy
- Striving to meet the needs of the stakeholders
- Developing others
- Leveraging on diversity
- Effective communication skills
- Inspiring leadership
- Building positive relationships
- Seeking to collaborate and cooperate

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Skill Code	ES-PMD-404G-1	Skill Category	Personal Management and Development
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Contribute towards a Learning Organisation		
Skill Description	This skill describes the ability to analyse employability issues for self and the organisation in the local and global contexts. It also includes contributing to the development of a learning organisation that can operate effectively in the knowledge-based economy as well as adapt to change and diversity.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Changes to work requirements and expectations in both local and global contexts • Methods to acquire skills and knowledge for the organisation • Types of skills and knowledge required by an organisation and methods to acquire them to stay competitive in the global context • Advantages and disadvantages of the various types of assessment methods to conduct training and development needs analysis • Strategies to enhance employees' receptiveness to training • Types of learning styles, learning theories and learning motivation theories • Motivational factors to learn for self and organisation • Benefits of a learning organisation culture • Types and stages of changes arising from the external environment and their characteristics • Types of strategies that can assist an organisation to adapt to change • Ways in which the types of strategies for managing and synergising diversity can contribute to organisational effectiveness 		

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<p>Application and Adaptation</p> <p><i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate information gathered from the news media to determine relevant issues and trends that affect the organisation both in the local and global contexts • Evaluate the implications of global competitiveness on one’s job and organisation • Establish and evaluate systems for facilitating transfer of knowledge and skills within an organisation • Establish and evaluate learning opportunities, resources and knowledge management infrastructure in an organisation
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse and adopt suitable approaches for organisational change • Develop strategies to assist an organisation to adapt to change
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage and synergise diversity of the various groups for organisational effectiveness

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<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Conduct training and development needs analysis using appropriate assessment methods and set learning goals for self and organisation • Conduct learning style analysis to identify learning styles of self and staff to ensure the effective acquisition and transfer of knowledge and skills within the organisation
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	ES-PMD-405G-1	Skill Category	Personal Management and Development
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Manage Workplace Challenges with Resilience		
Skill Description	This skill describes the ability to apply resilience techniques to manage challenges. It also includes assessing one's personal as well as the organisation's level of resilience.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Concept of resilience • Importance of resilience to an individual and/or an organisation • Types of assessment tools and methods to assess level of resilience • Characteristics of assessment tools and methods used to assess level of resilience • Methods for development of resilience • Characteristics of the various methods for development of resilience 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Assess the level of resilience at the individual and/or organisational level and its effects on achieving desired outcomes according to methods set • Apply resilience techniques to manage challenging circumstances at the individual and/or organisational level 		

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<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Examine the areas for development in resilience of the individual and/or organisation to achieve desired outcomes
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek support from others when dealing with challenging situations
<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Reflect on opportunities to learn and renew oneself to bolster resilience
<p>Range of Application</p>	<p>Concept of resilience must include:</p> <ul style="list-style-type: none"> • Definition of resilience from individual and/or organisation perspective • Psychology of resilience includes: <ul style="list-style-type: none"> ○ Cognitive ○ Neurophysiology ○ Psychoneuroimmunology <p>Domains of resilience must include:</p> <ul style="list-style-type: none"> • Individual's perspective includes: <ul style="list-style-type: none"> ○ Being in control to influence whatever happens next ○ Assuming ownership to improve the situation, regardless of one's

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formal responsibilities

- Being optimistic
- Able to surmount stressful situations and emerge stronger thereafter
- Able to adapt one's thinking to the situation at hand e.g. taking another's point of view, able to see things from a different perspective, able to see difficulties as challenges, etc.
- Able to use humour to get through difficult circumstances
- Able to accept that something has happened and moving on to deal with it
- Able to persevere and endure adverse situations
- Able maintain composure and a healthy level of physical and psychological wellness in the face of challenges.
- Able to contain setbacks in one aspect from spilling over to other professional or personal aspects
- Able to acquire resources to move on in challenges and reach one's full potential
- Organizational perspective includes:
 - Systems in place to ensure business continuity
 - Diversification of business activities to mitigate risks
 - Flexible systems and processes
 - Strong leadership
 - Responsiveness to operating environment
 - Systems to generate and protect business resources e.g. supply chains, financial and human resources
 - Systems and tools in place to train, maintain and track resilient individuals and teams

Factors affecting the level of resilience must include:

- An individual's level of resilience must include:
 - Nature of occupation e.g. fast-paced, dynamic vs. stagnant, predictable and routine
 - Personality and traits
 - Life experiences
 - Wellness of one's mind, spirit, body, et cetera
- An organisation's level of resilience includes:
 - Culture
 - Leadership
 - Systems and processes
 - Investment in training and development of staff

Resilience techniques must include:

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- Practising and internalizing resilient behaviours must include:
 - Not giving up and persisting in achieving goals despite the difficulties
 - Being decisive and able to make sound decisions despite uncertainties and pressures
 - Staying composed and positive in times of difficulty
 - Thinking clearly and staying focused under pressure
 - Recognising how your feelings affect performance and understanding how it affects your relationship with stakeholders, team members, customers, and in turn affects organisational performance
 - Distinguishing personal and professional outcomes
 - Responding to changes and situations with a positive and open mind
 - Creating a supportive culture within an organisation
 - Coaching others through difficulties
 - Recognising stress symptoms before they become an issue
 - Engaging in activities to maintain the well-being of one's mind, spirit and body
 - Controlling unwanted thoughts and emotional reactions

Formulating an action plan to develop resilience at the individual and/or organisational level, with components of an action plan to develop resilience at:

- The individual level must include:
 - Measurement/ outcome indicators to track development in resilience
 - Areas for development in resilience
 - Methods/ tools for collecting feedback on level of resilience
 - Schedule of timelines
 - Resources e.g. physical, financial required
 - Possible methods to develop resilience, such as:
 - Using journals to list and challenge limiting beliefs
 - Attending courses
 - Building a strong support network through nurturing strong and positive relationships, getting involved in community and volunteer work, or joining a faith or spiritual community
 - Building long-term stress resilience and reduce situational stress throughout the day
 - Sharing and exchanging stories
 - Setting progressive and incremental goals to build self confidence in specific areas
 - Reflecting on past experiences and using them to positively reframe future experiences

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- Practising relaxation techniques that can include imagery and breathing techniques
 - Applying nutritional strategies for boosting vitality, motivation and productivity,
 - Applying learned optimism techniques
 - Applying problem-solving and decision-making techniques to make sound decisions despite uncertainties and pressures
 - Controlling unwanted thoughts and emotional reactions
- The organisational level must include:
 - Measurement and outcome indicators to track development in resilience
 - Areas for development in resilience
 - Methods/ tools for collecting feedback on level of resilience
 - Schedule of timelines
 - Resources e.g. manpower, financial, logistics required
 - Plan to stakeholders
 - Possible methods to develop resilience, such as:
 - Encouraging innovation and experimentation
 - Implementing systems to ensure business continuity
 - Diversifying business activities to mitigate risks
 - Introducing systems and processes to enhance organisation's flexibility and adaptability and to generate and protect business resources e.g. supply chains, financial and human resources
 - Leadership development programmes
 - Implementing scenario analysis and planning to enhance organisation's responsiveness to operating environment
 - Investment in training and development for staff at all levels
 - Introducing culture-building and awareness programmes
 - Implementing communication and engagement sessions with staff at all levels
 - Implementing alternative work practices e.g. flexible working arrangements, empowerment of decision-making, et cetera
 - Implementing staff welfare programmes such as exercise days, staff bonding events, et cetera

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Skill Code	ES-ACE-401G-1	Skill Category	Analytical, Conceptual and Evaluative
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Support the Establishment of a Framework for Initiative and Enterprise		
Skill Description	This skill describes the ability to apply strategies to create, promote and sustain a culture of continuous improvement. It also includes identifying, evaluating and managing risks associated with improvement initiatives.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Managerial roles and responsibilities in developing an enterprising and self-directed workforce • Areas for continuous improvements in an organisation • Steps to implement continuous improvement at the workplace • Common pitfalls in establishing an organisational culture of continuous improvement • Areas for operating guidelines, corporate policies and strategies to support continuous improvement • Resources required to encourage innovation in an organisation • Ways to prepare employees to think and initiate for continuous improvement • Activities and guidelines to promote and sustain innovation and enterprise in an organisation • Steps and strategies for managing risks 		

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<p>Application and Adaptation</p> <p><i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Develop an organisational culture of innovation, enterprise and continuous improvement in consultation with stakeholders • Develop enterprise actions and strategies to improve organisational growth • Establish a framework to track and evaluate improvement efforts at the workplace • Perform risk assessment of a new policy or management decision on organisational performance • Evaluate implications of risks on organisational performance using appropriate tools and techniques • Develop a framework for an enterprise risk management programme in an organisation • Evaluate the effectiveness of the enterprise risk management programme in an organisation
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Establish policies and strategies to promote initiative behaviour for continuous improvement at the workplace • Develop comprehensive policies that encourage innovation and enterprise
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Provide organisational leadership to promote and sustain innovation and enterprise by cultivating and empowering employees to release their untapped potential and creativity

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<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Enhance and build skills for teams in the organisation to work together to make decisions, plan work and resolve differences • Engage in continuous self-assessment and review to enhance own skills to promote innovation and enterprise
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	ES-ACE-402G-1	Skill Category	Analytical, Conceptual and Evaluative
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Solve Problems and Make Decisions at Managerial Level		
Skill Description	This skill describes the ability to examine the causes of performance deficiency and its impact on an organisation. It also includes managing team dynamics to identify and address performance deficiency.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Advantages and disadvantages of the various methods to collect relevant and current information on organisational performance standards and quality control policies • Sources of information to identify performance deficiency • Advantages and disadvantages of the various methods to identify performance deficiency • Types of analytical tools and techniques and their application in the problem- solving and decision-making process • Principles of group dynamics and teamwork and techniques to manage team dynamics • Types of decision-making models for arriving at the preferred solution and their features • Factors affecting the effectiveness of an implementation plan • Tools and techniques to identify performance deficiency or cause of failure in implemented solution and implementation plan and their features • Advantages and disadvantages of various ways to formalise implemented solution as part of current Standard Operating Procedures (SOPs) • Organisational procedures for amending and disseminating SOPs 		
Application and Adaptation	The ability to:		

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<p><i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<ul style="list-style-type: none"> • Collect relevant and current information on organisational performance standards and quality control policies • Identify the types of performance deficiency and examine the causes and their impact on organisation-related aspects • Identify the root causes of the problems with team members using appropriate group facilitation techniques • Determine a preferred solution using appropriate methods and draw up an implementation plan to implement the solution at the workplace • Formalise implemented solution as part of the organisation’s current standard operating procedures • Evaluate the effectiveness of the implemented solution and implementation plan using appropriate techniques and criteria
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Generate creative ideas using appropriate idea generation and group facilitation techniques • Shortlist the most viable ideas based on a set of pertinent criteria using appropriate problem-solving and decision-making techniques and tools • Evaluate the impact of shortlisted ideas using appropriate problem-solving and decision-making techniques and tools • Develop a corrective action plan for any shortfalls identified in the implemented solution and conduct a follow-up review of modifications made
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Manage team dynamics and differing opinions through the use of conflict management techniques

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<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Reflect on own strengths and weaknesses and its impact in solving problems and making decisions
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	ES-IP-401G-1	Skill Category	People and Relationship Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Lead Workplace Communication and Engagement		
Skill Description	This skill describes the ability to lead workplace communication through the implementation of communication strategies and mechanisms. It also includes using negotiation strategies to achieve organisational goals and win-win outcomes.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Communication strategies, tools and methods associated with the various communication mechanisms to meet organisational goals and objectives and their features • Types and dimensions of organisational culture and their characteristics • Dimensions of conflict or dispute • Desired goals to be achieved as a outcome of negotiation • Motivations, priorities, interests and inclinations of stakeholders involved in a negotiation • Importance of considering cultural factors and various diversity issues that affect the communication in a negotiation process • Factors affecting the prioritising of goals and evaluation of possible trade-offs • Steps to develop relevant details and supporting arguments for negotiation • Negotiation styles and tactics for countering other party's style and their characteristics • Sources of power, conflict and obstacles to a successful negotiation and their implications in a negotiation 		

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<p>Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Conduct research on best practices in workplace communication, evaluate their suitability for adoption and establish benchmarks for the organisation • Develop communications plan to implement communication strategies and mechanisms to meet organisational goals and objectives • Evaluate employees' level of acceptance of organisation's vision, mission and core values and take corrective actions where needed • Evaluate effectiveness of communication strategies and mechanisms and implementation plan according to criteria set • Establish the actual causes of conflict or dispute and plan for negotiation taking into account organisational goals and objectives • Assess negotiation situation and develop negotiation strategies taking into consideration diversity issues • Evaluate negotiation process and delegate appropriate follow-up actions in a timely manner based on accurate and objective analytical techniques
<p>Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Evaluate gaps and barriers in workplace communication based on determined benchmarks and establish communication strategies and mechanisms that meet organisational goals and objectives
<p>Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Use communication strategies to influence organisational culture and motivate employees to commit to the organisation's vision, mission and core values • Conduct negotiation to achieve organisational goals and win-win outcomes by applying negotiation strategies and effective communication skills

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<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Reflect on gaps in own communication and negotiation style to make adjustments for future interactions
<p>Range of Application</p> <p>(where applicable)</p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated</i></p>	<p>N/A</p>

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Skill Code	ES-IP-402G-1	Skill Category	People and Relationship Management
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Develop a Work Team		
Skill Description	This skill describes the ability to establish teams and allocate resources in achieving organisational goals. It also includes cultivating open communication for teamwork and evaluating the progress of the team.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Critical factors in building a high performance team • Characteristics and impact of team synergy on team performance • Techniques for team building and development • Coaching process aligned to organisational vision and business goals • Platforms and tools to create opportunities for team members to contribute ideas and skills • Components of systems to recognise contributions of team members • Implications of diversity issues on coaching • Components of systems for development of staff • Motivational theories related to rewards and recognition for staff • Ways to determine trends in team performance 		

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<p>Application and Adaptation</p> <p><i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse the types of teams required and their value in achieving organisational goals • Identify and elect work team members and align roles, responsibilities, objectives and expectations of the work team to organisational goals • Delegate tasks and allocate resources to facilitate work team towards the achievement of goals and objectives, taking into consideration diversity issues • Evaluate impact of task and role delegation among team members on team synergy and make adjustments where necessary in accordance to criteria set • Encourage teamwork and foster commitment and sense of ownership among team members based on team building and development techniques • Assess the barriers to group interaction and communication and establish infrastructure to facilitate knowledge management and work team coaching which is aligned to organisational vision and business goals
<p>Innovation and Value Creation</p> <p><i>It refers to the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to organisational goals.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Monitor and evaluate team progress and performance in achievement of goals and objectives
<p>Social Intelligence and Ethics</p> <p><i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Communicate the roles, responsibilities, objectives and expectations to the work team and empower team members to accomplish them • Communicate feedback to team using the most suitable means and data and provide recommendations to improve performance • Recognise and reward team work and performance taking into consideration implications of diversity issues

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<p>Learning to Learn</p> <p><i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i></p>	<p>The ability to:</p> <ul style="list-style-type: none"> • Seek feedback from peers and supervisors to improve own future performance
<p>Range of Application</p> <p><i>(where applicable)</i></p> <p><i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i></p>	<p>N/A</p>

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Skill Code	ES-IP-403G-1	Skill Category	Interpersonal
		Skill Sub-Category <i>(where applicable)</i>	N/A
Skill	Lead a Virtual Team		
Skill Description	This skill describes the ability to analyse the importance of virtual collaboration and establish a virtual team in achieving organisational goals and objectives. It also includes supporting infrastructure to operationalise virtual collaboration, fostering cohesion and commitment among virtual team members and managing virtual team's performance towards common goals and objectives set.		
Knowledge and Analysis <i>It refers to gathering, cognitive processing, integration and inspection of facts and information required to perform the work tasks and activities.</i>	<p>The ability to understand:</p> <ul style="list-style-type: none"> • Concept of virtual collaboration • Types of virtual teams • Diversity issues and their implications on virtual collaboration • Critical success factors for leading virtual teams 		
Application and Adaptation <i>It refers to the ability to perform the work tasks and activities required of the occupation, and the ability to react to and manage the changes at work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Analyse the need for virtual collaboration in achieving organisational goals and objectives • Establish a virtual team in line with intended goals and objectives • Establish an infrastructure to operationalize virtual collaboration based on collaborative tools and training programmes 		
Innovation and Value Creation <i>It refers to the ability to generate purposive ideas to improve work performance and/or</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Formulate appropriate strategies to address shortfalls in virtual team's performance 		

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<i>enhance business values that are aligned to organisational</i>	
Social Intelligence and Ethics <i>It refers to the ability to use affective factors in leadership, relationship and diversity management guided by professional codes of ethics.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Foster cohesion and commitment among virtual team members towards common goals and objectives
Learning to Learn <i>It refers to the ability to develop and improve one's self within and outside of one's area of work.</i>	<p>The ability to:</p> <ul style="list-style-type: none"> • Identify and assess one's leadership responsibilities to manage virtual team's performance in line with goals and objectives set
Range of Application (where applicable) <i>It refers to the critical circumstances and contexts that the skill may be demonstrated.</i>	<p>Types of virtual teams must include:</p> <ul style="list-style-type: none"> • Networked teams <ul style="list-style-type: none"> ○ Geographically distributed and not necessarily from the same organization ○ Frequently created and just as frequently dissolved; depending on the complexity of the issue, additional members to the team may be added at any time ○ Usually formed to discuss specific topics where members from the area of expertise, possibly from different organizations, pitch their ideas in the same discussion ○ Existence period of these teams may vary significantly depending on how fast or slow the issue is resolved • Parallel teams <ul style="list-style-type: none"> ○ Highly task-oriented teams that usually comprise specialized professionals ○ Generally only required for very short span of time; however, they are not dissolved after completion of the tasks ○ May be either internal or external to the organisation • Project development teams

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- Geographically distributed and may operate from different timezones
- Mainly focused on creating new products, information systems or organizational processes for users and/or customers
- Have added autonomy to make decisions, on top of recommendations
- May add or remove members of their team at any point in time, as needed for their area of expertise
- Work, production or functional teams
 - Totally function specific, working only on a particular area within an organization (i.e. finance, training, research, etc).
 - Operate virtually from different geographical locations, these teams exist to perform regular or on-going tasks
- Service Teams
 - Geographically located in different timezones and are assigned to a particular service such as customer support, network upgrades, data maintenance, etc.
 - Each team works on providing the particular service in their daylight hours and at the end of day, work is delegated to the next team which operates in a different timezone so that service is available on a 24/7 basis

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Version Control

Version	Date	Changes Made	Edited by
1.0	12 October 2016	Initial Version	SSG and EDB

Definitions of the Five (5) Domains

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Domain	Definition
Knowledge and Analysis	Knowledge includes the gathering of facts and information through traditional and digital forms. Analysis involves the cognitive processing, integration and inspection of single or multiple sources of facts and information required to perform work tasks and activities and takes into consideration, the work contexts in which the tasks and activities are carried out. The result of knowledge and analysis produce judgements on work tasks/activities/issues/areas, and the conceptualisation of solutions to solve problems at work.
Application and Adaptation	Application involves the ability to perform work tasks and activities defined by the requirements of the occupation. Adaptation involves the ability to react to and manage the changes in the work contexts. The result of application and adaptation leads to the production of psycho-motor actions and behavioural reactions to the work tasks/activities/issues/areas, and the execution of the planned solutions to solve problems at work.
Innovation and Value Creation	Innovation includes the ability to generate purposive ideas to improve work performance and/or enhance business values that are aligned to the organisational goals. As a result of innovation, the organisation is able to reap the values from individual or team contributors to achieve organisational growth.
Social Intelligence and Ethics	Social intelligence includes the ability to appreciate and use affective factors in leadership, relationship and diversity management guided by professional codes of ethics as effective individuals or team contributors.
Learning to Learn	Learning-to-learn includes the ability to improve on self-development within and outside of one's area of work. It involves the continual inspection of one's knowledge, analytical, application, adaptive, innovative and social skills that are needed to perform the work optimally and/or solve problems effectively.