

TSC Category	Maintenance Management					
TSC	Maintenance Planning and Scheduling					
TSC Description	Develop and execute maintenance plans and schedules to optimise plant availability and reliability					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			ECM-MAI-3003-1.1	ECM-MAI-4003-1.1	ECM-MAI-5003-1.1	
			Interpret maintenance plans and schedules to execute maintenance work for process plants, equipment and systems	Develop maintenance plans and schedules in coordination with internal and external stakeholders to optimise plant availability and reliability	Evaluate maintenance plans and schedules to manage maintenance planning and execution and to ensure alignment with maintenance framework and resource management strategy	
Knowledge			<ul style="list-style-type: none"> • Planning and scheduling concepts • Process equipment and system operating and maintenance regimes • Predictive and preventive maintenance concepts and methodologies • Process equipment and system servicing and inspection requirements • Vendors' maintenance information and guidance notes • Workplace Safety and Health (WSH) regulatory requirements related to the inspection of equipment by authorised examiners 	<ul style="list-style-type: none"> • Maintenance planning and scheduling principles and practices • Process equipment and system operating maintenance regimes • Equipment maintenance cycle times • Vendors' maintenance information and guidance notes • Principles of equipment failure analysis • Workplace Safety and Health (WSH) regulatory requirements related to the inspection of equipment by authorised examiners • Workflows and work planning • Methods of resource planning and scheduling • Methods of decision making for repair or replace strategies 	<ul style="list-style-type: none"> • Maintenance planning principles and practices • Workflow and strategic resource planning management principles • Methods of measuring maintenance performance and schedule compliance • Man-hour estimation and wrench time principles • Predictive maintenance technology systems applications • Statistical data analysis, methods and techniques • Methods of decision making on equipment repair or replacement 	

**SKILLS FRAMEWORK FOR ENERGY AND CHEMICALS
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

				<ul style="list-style-type: none"> • Technology applications for preventive maintenance methods 		
Abilities			<ul style="list-style-type: none"> • Coordinate the execution of maintenance work with internal and external stakeholders in accordance with maintenance plans and schedules • Ensure the implementation of maintenance schedules • Provide inputs to Maintenance Planner on the maintenance regime and the requirements for process equipment and systems • Contribute to the continuous improvement of planning and scheduling activities 	<ul style="list-style-type: none"> • Develop plans and schedules for maintenance activities • Undertake planning reviews and updates • Communicate with maintenance teams on maintenance and inspection activities • Contribute to the continuous improvement of planning and scheduling activities • Produce planning and scheduling reports • Apply technology driven preventative maintenance systems and tools to supervise and prioritise plant preventative and corrective maintenance activities 	<ul style="list-style-type: none"> • Manage maintenance planning and scheduling teams • Plan and react to plant emergency breakdowns • Endorse maintenance plans and schedules • Evaluate maintenance plans and schedules to optimise the deployment of maintenance resources and manpower • Provide detailed reports and statistical analysis of planning activities • Manage the implementation and integration of technology-driven predictive maintenance systems and maintenance plans and schedules 	