TSC Category	Technology Management					
TSC	Robotics and Automation Application					
TSC Description	Apply and integrate evaluated technologies into organisation operations or processes to achieve organisation desired outcomes and reduce reliance on manual labour					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
		EVS-TEM-2004-1.1	**EVS-TEM-3004-1.1**	**EVS-TEM-4004-1.1**	**EVS-TEM-5004-1.1**	
		Apply procedural knowledge of robotic systems and automated technologies to execute environmental services tasks	Supervise the use of robotic systems and automated technologies to execute environmental services tasks	Review performance of automated workflows for process improvements	Formulate new environmental services workflows to adopt robotics and automated technology to streamline processes	
Knowledge		• Types of robotic systems, automated technologies and process control systems utilised in environmental services • Methods of operating robotic systems for environmental services tasks • Procedures of safe systems operation • Types of sensors and actuators • Procedures for installing actuators and sensors • Best practices in robotics and automation	• Organisational workflows • Principles of automated technologies and robotic systems • Best practices in robotics and automation • Procedures for setting up and inspecting robotic systems and automated technologies • Approaches to oversee environmental services tasks through the use of robotic systems and automated technologies • Types and applications of control loop components and controllers	• Range of applications of automated technologies and robotic systems • Methods of evaluating resources and skills to carry out environmental services tasks using automated technologies and robotic systems • Types of logic control programs • Concepts pertaining to performance specifications and analysis • Best practices in robotics and automation • Principles of path and trajectory planning	• Organisation's products and processes • Methods of developing detailed operating procedures for automated technologies and robotic systems • Methods to influence adoption of new technologies • Impact of robotics and automation on environmental services operations • Principles of path and trajectory planning • Principles of change management	
Abilities		• Operate automated technologies and robotic systems according to organisational procedures • Follow safety procedures when operating automated technologies and robotic systems	• Oversee the use of automated technologies and robotic systems • Evaluate faults in the use of automated technologies and robotic systems for environmental services processes	• Evaluate various automated technologies and robotics systems to compare strengths and limitations • Determine the feasibility of recommended automation and robotic systems to	• Determine range of application, resources, skill requirements and production feasibility for automated technologies and robotic systems • Develop technical operating procedures for robotics and automation	

		• Identify and report any issues with the automated technologies and robotic systems • Recommend changes to improve processes in accordance to organisational procedure	• Interpret and extract relevant process parameters from given specifications • Apply corrective actions for automatic and manual shut-down during critical and emergency situations • Review feedback on operation of automated technologies and robotic systems and incorporate into updated operating processes	environmental services processes • Apply optimisation techniques to improve efficiency of automated processes and product quality • Assess improvements on the products and processes • Evaluate the benefits and trade-offs of implementing advanced optical metrology to the business	• Evaluate the benefits and trade-offs of implementing advanced robotics and automation to the business • Formulate processes and procedures for environmental services components using robotics and automation • Determine post-processing procedures for environmental services components using robotics and automation	