

TSC Category	Discipline Engineering Support Management					
TSC	Technology Road Mapping					
TSC Description	Plan short-term and long-term goals for the implementation of new and emerging process plant and equipment technologies, to continuously improve plant performance and to make capital out of future market needs					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
					ECM-DES-5004-1.1	ECM-DES-6004-1.1
					Drive the organisation's processes using strategic technology and operations road-mapping	Exploit the organisation's strengths to enhance its business competitiveness through strategic technology and operations road-mapping
Knowledge					<ul style="list-style-type: none"> Continuous improvement management principles and practices Types of strategic management of engineering technology and innovation New and emerging technologies for process plants and equipment Methods to design, organise and prepare for the organisation's road-mapping exercise Procedures for conducting strategic analyses and performance dimension of an organisation's products and services Methods of analysing market trends and external drivers, relevant to the organisation's business Procedures for formulating the organisation's internal goals and drivers 	<ul style="list-style-type: none"> Methods to design, organise and prepare for the organisation's road-mapping exercise Procedures to conduct strategic analyses Procedures to conduct performance dimension of an organisation's products and services Strategies for technology and operations road-mapping New and emerging technologies for process plant operations Global and local market trends, external and internal drivers and the organisation's internal goals and drivers

					<ul style="list-style-type: none"> Methodologies and tools for brainstorming new products and services, and required technology and resources to support their development Methods of prioritising market drivers, internal goals and drivers and new products and services 	
Abilities					<ul style="list-style-type: none"> Design and implement organisational policy and practices to encourage technological innovation Manage technology and innovation initiatives and projects Manage research and field studies, including testing of new plant and equipment technologies Evaluate technology changes, their costs and benefits Assess and validate new and emerging technologies for process plants and equipment Advise management on the appropriate uses and strategic benefits of new and emerging technologies Implement future-proofing and capacity growth factoring into system designs Design, organise and prepare for the organisation's road-mapping exercise Conduct strategic analysis and performance dimension of an organisation's 	<ul style="list-style-type: none"> Drive the organisation's road-mapping exercise Set direction for the organisation's market drivers, internal goals and drivers and new products and services Synergise departments' and the organisation's direction for the adoption of new and emerging technologies for process plant operations Chart the organisation's roadmap Endorse and review the organisation's final roadmap

					<p>products and services, based on research, analysis and prioritisation of market drivers, internal goals and drivers and new products and services</p> <ul style="list-style-type: none">• Assist in the charting of the organisation's roadmap	
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