

SKILLSFUTURE SINGAPORE
CRITICAL CORE SKILLS (CCS) REFERENCE DOCUMENT

CCS Category	Thinking Critically		
CCS	Problem Solving		
CCS Description	Generate effective and efficient solutions to solve problems and capitalise on new opportunities		
CCS Proficiency Description	Basic	Intermediate	Advanced
	CCS-PRS-B002-1	CCS-PRS-I002-1	CCS-PRS-A002-1
	Identify problems and implement guidelines and procedures to solve problems and test solutions	Determine underlying causes of problems and collaborate with other stakeholders to implement and evaluate solutions	Anticipate potential problems to drive a culture of continuous improvement which seeks to turn problems into opportunities across the organisation
Knowledge	<ul style="list-style-type: none"> • Problem identification techniques • Questioning techniques • Types of corrective actions • Problem solving processes, tools and techniques • Experimentation techniques • Impact measurement techniques 	<ul style="list-style-type: none"> • Root cause analysis techniques • Decision evaluation and prioritisation frameworks • Exercises for developing big picture thinking approaches • Strategies to manage experimentation processes • Stakeholder analysis techniques • Risk analysis techniques • Types of metrics to measure solution effectiveness 	<ul style="list-style-type: none"> • Organisation's vision, objectives and operating climate • Emerging problem solving processes, tools and strategies • Types of social, political, economic and cultural factors which impact stakeholder relationships • Conflict management strategies • Risk management strategies • Strategies to evaluate solution effectiveness
Abilities	<ul style="list-style-type: none"> • Implement problem identification techniques to recognise issues within work area • Identify decisions to be made to solve problems • Suggest potential corrective actions to solve problems • Conduct work area experiments to test potential solutions • Report any issues which occur during solution testing to other stakeholders • Collect information to monitor implementation of potential solutions against impact criteria 	<ul style="list-style-type: none"> • Diagnose underlying causes of issues by considering wider contexts • Encourage behaviours and practices for team members that promote effective problem solving approaches and continuous improvement • Facilitate exercises with different stakeholders to develop big picture thinking approaches to inform solution development • Collaborate with other stakeholders to seek opinions on potential solutions • Develop experiments to test potential solutions • Determine the constraints and risks associated with potential solutions • Analyse outcomes of experiments to recommend the most suitable solution for a problem • Engage different stakeholders to secure buy-in for proposed solution • Review the effectiveness of the problem solving process and solution against defined goals 	<ul style="list-style-type: none"> • Define objectives of organisational problem solving processes in line with organisation vision, objectives and operating climate • Synthesise emerging trends to design organisational problem solving processes, tools and techniques • Champion a culture of continuous improvement across the organisation • Evaluate multiple variables and contexts to anticipate potential problems which may occur • Determine appropriate stakeholders to be involved in problem solving processes in the organisation • Oversee collaboration between multiple stakeholders across the organisation to design solutions • Direct the resolution of any conflicts during problem solving processes • Evaluate the business implications of implementing the proposed solutions across the organisation • Endorse solutions to be implemented across the organisation • Establish strategies to evaluate the effectiveness of problem solving processes across the organisation