TSC Category	Ground Handling Services and Operations					
TSC	Ground Support Equipment Failure Analysis					
TSC Description	Examine malfunctioning Ground Support Equipment (GSE) to identify and rectify the causes of failures					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
			ATP-GSO-3011-1.1	**ATP-GSO-4011-1.1**	**ATP-GSO-5011-1.1**	
			Perform initial failure analysis to determine causes of Ground Support Equipment (GSE) malfunctions	Review Ground Support Equipment (GSE) failure analysis results and implement changes to eliminate causes of failures	Determine directions for Ground Support Equipment (GSE) recovery operations and mitigation of failures	
Knowledge			• Types and purposes of different GSE used during ground handling services and operations • Safety standards and requirements for operating GSE • GSE wirings, technical diagrams and schematics • Failure analysis techniques such as fault hazard analysis and sneak circuit analysis • Specifications of Original Equipment Manufacturers (OEMs) on GSE operations	• Types and purposes of different GSE used during ground handling services and operations • Safety standards and requirements for operating GSE • Failure analysis techniques such as fault hazards, sneak circuit analysis and Failure Modes, Effects and Criticality Analysis (FMECA) • Common causes of GSE failures • Specifications of Original Equipment Manufacturers (OEMs) on GSE operations • International Air Transport Association (IATA) Safety Audit for Ground Operations (ISAGO) processes	• Types and purposes of different GSE used during ground handling services and operations • Safety standards and requirements for operating GSE • Failure analysis techniques such as fault hazards, sneak circuit analysis and Failure Modes, Effects and Criticality Analysis (FMECA) • Cost impact analysis • Procurement procedures for new GSE parts and components • Tools and techniques of project management • International Air Transport Association (IATA) Safety Audit for Ground Operations (ISAGO) processes	
Abilities			• Determine systems, subsystems and safety critical components for different GSE	• Analyse failure analysis results to scout out factors attributed to GSE failures	• Communicate and convey status of failure analysis to relevant	

			• Deploy appropriate failure analysis techniques to examine causes of GSE malfunctions • Recommend procedures to recover GSE performance • Administer follow-up actions required to recover GSE performance	• Develop plans to mitigate future GSE failures based on failure analysis results • Update and review documentation and records pertaining to GSE failure analysis	stakeholders and/or departments • Collaborate with relevant stakeholders and/or departments to institute corrective actions to bolster GSE performance • Lead the procurement of new GSE components based on GSE failure analysis results	