

# Improvement Improvement Technician L3 Skills Scan

| Learning Area                                            | Learning Outcome | Learning Outcome Description                                                                                                                                                                                            | Limited | Reasonable | High |
|----------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|------|
| Continuous Improvement Delivery                          | K6               | Principles & methods: Six Sigma principles per ISO13053 (International Organisation for Standardisation), interim containment actions, Lean principles                                                                  |         |            |      |
|                                                          | K7*              | Project selection and scope: Selection matrix, scoping tree                                                                                                                                                             |         |            |      |
|                                                          | K14              | Experimentation: Active analysis versus one factor at a time, Plan Do Check Act                                                                                                                                         |         |            |      |
|                                                          | K15*             | Identification and prioritisation: Brainstorming, selection criteria                                                                                                                                                    |         |            |      |
| Process Mapping and Problem Definition                   | K8*              | Problem definition: Exploratory data analysis, data collection planning, problem and goal statements                                                                                                                    |         |            |      |
|                                                          | K9*              | Process mapping and analysis: Supplier Input Process Output Customer (SIPOC), process mapping, value and waste analysis, performance metrics - discrete data                                                            |         |            |      |
| Data Collection and Statistical Analysis                 | K10*             | Data acquisition for analysis: Data stratification, sampling theory, data types, variation types and sources, data collection tools, operational definition and principles of measurement error                         |         |            |      |
|                                                          | K11*             | Basic statistics and measures: Control charts - discrete data                                                                                                                                                           |         |            |      |
|                                                          | K12*             | Process capability and performance: Capability analysis - continuous data                                                                                                                                               |         |            |      |
|                                                          | K13              | Root cause analysis: Histograms                                                                                                                                                                                         |         |            |      |
| Project Management and Compliance                        | K1               | Compliance: Legislative and customer compliance requirements including environment and health and safety                                                                                                                |         |            |      |
|                                                          | K4*              | Project management: Project charter, Gantt chart, reporting documentation, Red Amber Green (RAG) status, communication (verbal and non-verbal channels) and implementation plans                                        |         |            |      |
| Stakeholder Engagement, Change Support and Communication | K2               | Team formation and leadership: Improvement team roles and responsibilities in a change environment                                                                                                                      |         |            |      |
|                                                          | K3               | Self-development: Different sources for knowledge development                                                                                                                                                           |         |            |      |
|                                                          | K5               | Change management: Roles of the manager and leader within change. Influencing, reinforcement and coaching principles                                                                                                    |         |            |      |
| Process Control, and Sustainable Adoption                | K16              | Sustainability and control: Process                                                                                                                                                                                     |         |            |      |
| Continuous Improvement Delivery                          | S5               | Principles and methods: Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits                                                                     |         |            |      |
|                                                          | S6*              | Project selection and Scoping: Identify and scope improvement projects and establish clear measurable objectives                                                                                                        |         |            |      |
|                                                          | S16              | Identification and prioritisation: Identify and prioritise improvement solutions                                                                                                                                        |         |            |      |
| Process Mapping and Problem Definition                   | S7*              | Problem definition: Develop a problem or opportunity statement supported by validated data                                                                                                                              |         |            |      |
|                                                          | S8*              | Voice of the customer: Apply techniques to identify customers, their requirements and translate these to metrics                                                                                                        |         |            |      |
|                                                          | S9*              | Process mapping and analysis: Apply process mapping tools to visualise processes, analyse process performance establishing key insights for performance improvement                                                     |         |            |      |
|                                                          | S10              | Lean tools: Apply techniques such as identification and removal of 8 wastes, 5S (Sort, Shine, Set, Standardise, Sustain), standard work, kaizen, visual displays and controls, error proofing, preventative maintenance |         |            |      |
| Data Collection and Statistical Analysis                 | S11*             | Data acquisition for analysis: Develop data collection plan and validated measurement processes to understand performance                                                                                               |         |            |      |
|                                                          | S12*             | Basic statistics and measures: Establish patterns and trends in data over time using tally, pie, run/trend and pareto charts                                                                                            |         |            |      |
|                                                          | S13*             | Data analysis-statistical methods: Identify common and special cause variation                                                                                                                                          |         |            |      |
|                                                          | S14*             | Process capability and performance: Analyse product/process performance using good quality data                                                                                                                         |         |            |      |
|                                                          | S15*             | Root cause analysis: Use cause and effect diagrams, technique of 5 whys and graphical analysis to understand and verify root causes                                                                                     |         |            |      |
| Project Management and Compliance                        | S1               | Compliance: Work in accordance with organisational controls and statutory regulations                                                                                                                                   |         |            |      |
|                                                          | S3*              | Project management: Plan, manage and implement improvement activities. Identify and support management of risks. Develop the business case for improvement activity and implementation                                  |         |            |      |
| Stakeholder Engagement, Change Support and               | S2*              | Communication: Share improvement progress through appropriate reporting                                                                                                                                                 |         |            |      |
|                                                          | S4               | Change management: Engage through communications. Reinforce – positively and negatively. Effectively coach peers                                                                                                        |         |            |      |
| Process Control, and Sustainable Adoption                | S17              | Benchmarking: Recognise the value of sharing best practice                                                                                                                                                              |         |            |      |
|                                                          | S18*             | Sustainability and control: Create control and reaction plans with detection measures, identify opportunities to embed changes to leverage benefit to the business                                                      |         |            |      |
| Drive for results                                        | B1               | Clear commitment for identifying opportunities and delivering improvements, pays attention to detail                                                                                                                    |         |            |      |
| Team-working                                             | B2               | Helps when asked, works effectively in a diverse team, considers impact of own actions on others, motivates peers                                                                                                       |         |            |      |
| Professionalism                                          | B3               | Acts in a moral, legal and socially appropriate manner, aligns behaviours to the organisations values, trusted to working on own when appropriate                                                                       |         |            |      |
| Continuous development                                   | B4               | Acts upon feedback, reflects on performance and has a desire for learning                                                                                                                                               |         |            |      |
| Safe working                                             | B5               | Ensures safety of self and others, challenges safety                                                                                                                                                                    |         |            |      |

(\*) Knowledge and skills statements which offer opportunities to develop functional English and maths are identified with an asterisk