

Specification of Competency Standards
for the Testing, Inspection and Certification Industry
Unit of Competency

Functional Area - Testing Operations

Title	Process data
Code	105872L4
Range	This unit of competency (UoC) covers the abilities to manipulate measurement data and verify the accuracy of processed data in a testing / calibration laboratory.
Level	4
Credit	2 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Possess knowledge of data processing and verification requirements</p> <ul style="list-style-type: none"> • Describe the requirements of recording and presenting data and observations. • Define the acceptance criteria of data after manipulation • Employ the commercial software and/or self-developed programmes for processing measurement data. • Determine the processing conditions, e.g. time window, ion ratio, threshold peak area for chromatographic processing. • Command the mathematical concepts, e.g. algebraic, power, exponential and/or logarithmic functions. <p>2. Process measurement data</p> <ul style="list-style-type: none"> • Retrieve measurement data using appropriate files and/or application software. • Apply appropriate software or programmes and the acceptance criteria to process measurement data, e.g.: <ul style="list-style-type: none"> ○ integration and quantification of the chromatographic measurement data, ○ confirmation of presence / absence of identity of target analytes, ○ present graphical data, chromatograph, and spectrum using appropriate scales to span the range of data or display trends, ○ computation of average, standard deviation, maximum difference, maximum and minimum of continuous data logging system. • Apply appropriate mathematical concepts, e.g. decibel usage, linear scale, log scale exponential function to convert data to the specified scale. • Present setup and observations diagrammatically, e.g. force and connection diagram. • Verify the accuracy of transcription of measurement data and processed results. • File and store data securely in accordance with documented procedures. <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • Ensure the measurement data are processed accurately and precisely. • Maintain the confidentiality of data in accordance with documented procedures and code of conduct of the laboratory.
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> • apply appropriate software, programmes or tool to process the measurement data to obtain valid final results, • verify accuracy of processed data in compliance with specifications of test methods/standards or documented procedures.
Remark	