

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

Functional Area - Testing Operations

Title	Apply statistical techniques in sampling
Code	105773L4
Range	This unit of competency (UoC) covers the abilities to apply statistical techniques in sampling in order to collect representative samples for estimating the performance of the batch of products by sample testing and data analysis.
Level	4
Credit	2 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Possess knowledge of statistical techniques and sampling requirements</p> <ul style="list-style-type: none"> • Identify and describe statistical terms and measures such as mean, range, frequency, mode, median, standard deviation, relevant graphs and charts. • Describe different statistical methods for sampling. • Specify the regulatory, workplace and standard requirements for sampling. • Study the established sampling plan. <p>2. Apply statistical techniques in sampling</p> <ul style="list-style-type: none"> • Apply mathematical skills to a level required to undertake accurate sampling. • Analyse the sampling plan to determine the scope and detailed requirements of sampling and the quantity of samples required. • Collect and perform basic statistical calculations on samples drawn from the sampling site. • Use statistical analysis to verify the sampling process. <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • Ensure the sampling is conducted using the statistical techniques according to the requirements.
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> • apply appropriate statistical techniques in sampling to collect representative samples, • monitor and verify the sampling process in accordance with the sampling plan.
Remark	