



SINGAPORE
WORKFORCE SKILLS
QUALIFICATIONS

INTERPRETATION OF WSQ COMPETENCY STANDARDS FOR TRAINING AND ASSESSMENT



About WSQ

WSQ, or the Singapore Workforce Skills Qualifications, is a national credentialing system that trains, develops, assesses and recognises adult workers for competencies they need to stay employable. Based on standards developed by the Singapore Workforce Development Agency (WDA) and various industries, WSQ ensures workers acquire skills needed by employers at the workplace. With clear progression pathways, workers can also use WSQ to upgrade their skills and plan their careers. As training and assessment are competency-based, not academic-based, workers have to demonstrate the right competencies before they are certified. Experienced workers however, can receive WSQ certification without training. WSQ is accessible to all workers, as its entry criteria are skills and knowledge, not formal qualifications. The quality of WSQ is assured by WDA, from the development of competency standards, accreditation of training providers to the award of its qualifications.

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INTRODUCTION



Introduction

This guide is published for the practising continuing education and training (CET) personnel who are responsible for the design and evaluation of WSQ training and assessment programmes. This guide provides essential information and policy position on the interpretation and usage of WSQ competency standards for the purpose of designing WSQ training and assessment programmes.

FUNDAMENTALS OF WSQ COMPETENCY STANDARDS

The Workforce Skills Qualifications (WSQ) system is designed as the national credentialing system that facilitates skills acquirement and upgrading for career entry, career progression and career transition for all occupational levels. The WSQ system is intended to provide and certify knowledge and skills required for occupations.

WSQ competency standards are reference documents¹ that capture the most relevant information about a particular job task of a job role in a particular industry setting. A WSQ competency standard documents the expected work performance outcomes, the expected level of performance, the knowledge that supports the delivery of work performance outcomes and the work contexts under which the work performance outcomes are to be delivered, according to industry agreed minimum standards and expectations.

In other words, a competency standard states what an individual is able to do, what an individual should know, when and where an individual would perform his job role and how well an individual would perform in his job role.

Uses Of WSQ Competency Standards

WSQ competency standards are designed to serve multiple users in the context of Singapore workforce education and development. The intended users of the competency standards include individuals, employees, employers, training providers, government agencies and awarding bodies. The benefits and uses of WSQ competency standards for various users are highlighted below.

User Group	Benefits and Uses of WSQ Competency Standards
Employee / Individual	For self-evaluation so as to ascertain if he / she is ready for a particular job and for identification of own development needs. Receive subsidised quality training and development. Obtain nationally recognised credentials.
Employer / Organisation	For recruitment, selection, development, performance management and talent management. An employer can use competency standards to decide and design tools that will place, develop and promote staff for maximum performance to achieve business needs. Assured of quality training of staff by providers.
Training provider	For development and implementation of CET interventions. To design training and assessment programmes that best develop trainees' abilities according to skills sets stated in competency standards and to help trainees progress according to different levels of competency. Receive national endorsement in training delivery and assessment.
Authority / Government	For management and planning of industry manpower requirements. To determine skills level of key occupational groups with the aims of improving the quality and productivity of particular industry. Some agencies use the competency standards to facilitate the legislation and licensing of skilled occupations. Examples include NEA, SIRD, STB, MOM.
Awarding body	For awarding of qualifications and certifications. WDA is the awarding body of WSQ, utilises the competency standards to design, quality assure and award qualifications and certifications.

¹ WSQ competency standards are a key source of information for individuals, employers and training providers who require detailed information on work performance standards and skills and knowledge required of an individual by industry.

COMPETENCY UNIT AND COMPETENCY STANDARD



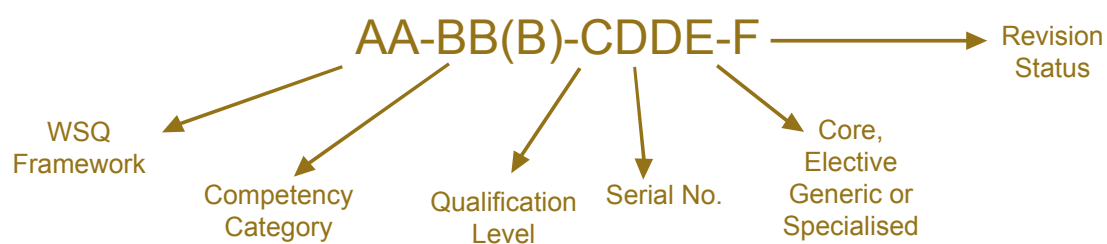
Competency Units are the building blocks of WSQ. Each WSQ Competency Unit:

- Consists of work items, which can be undertaken by an individual
- Has credibility as a stand-alone unit for training and certification
- Has economic value to an individual and to his employer, i.e. must add value to employment
- Is different from all other WSQ competency units

WSQ competency units are derived from analyses of the occupations, functions and work processes of an industry. Types of analysis include occupational analysis, functional analysis, value-chain analysis, job-family analysis, proficiency level analysis. WSQ frameworks are designed based on selected types of analyses most relevant to the workforce development requirements of the specific industry. The competency units derived under a WSQ framework reflect how work is organised and jobs are defined in order to deliver the goods and services of the industry. The types of analysis used in various WSQ frameworks is presented below.

Types of Analysis	Descriptions	Frameworks
Value-chain analysis	The analysis is based on the full value-chain of industry operation.	Manufacturing, Tourism, Food & Beverage, Logistics
Functional analysis	The analysis is based on a typical organisation's function units.	Retail, Precision Engineering, Human Resources, Service Excellence
Job-family analysis	The analysis is based on key occupational groupings within the industry sector.	Financial Services, Landscape, Healthcare Support
Occupational analysis	The analysis is narrowly focused on one particular occupational group.	Aerospace non-license aircraft technician
Proficiency level analysis	The analysis is based on expected proficiency level of mastery.	ESS English and Chinese Workplace Literacy & Numeracy

The list of all competency units in a WSQ framework is presented in the competency map for the WSQ framework. Every competency unit is given a unique code that locates it to a specific WSQ framework, competency category and competency level.



	Title	Code	WSQ Framework	Competency Category	WSQ Qualification Level	Serial No.	Type of Unit	Revision Status
Examples	Monitor visual merchandising presentation	RE-MM-309C-2	Retail (RE)	Merchandising and Marketing (MM)	Advanced Certificate (3)	09	Core (C)	Version 2 (2)
	Manage De-Ionised Water System	SC-FAC-408E-1	Wafer Fab	Facility (FAC)	Diploma (4)	08	Elective (E)	Version 1 (1)

Most WSQ competency units are industry and occupational specific and some are more generic in nature. These include the competency units under the Employability Skills System (ESS) Workplace Skills (WPS) series, the ESS Workplace Literacy & Numeracy (WPLN) series, Service Excellence WSQ, Human Resource WSQ, the Leadership & Business Management WSQ competency units.

COMPETENCY UNIT AND COMPETENCY STANDARD

Difference Between Competency Unit And Competency Standard

The terms 'Competency Unit' and 'Competency Standard' are often used interchangeably because competency standards are usually developed on a competency unit basis. When presented in a competency map, WSQ competency units help us understand how work items and jobs are organised within industries. An example of a WSQ competency map is shown in Appendix A. WSQ competency standards help us understand how well an employee must be able to perform at his job. WSQ competency standards:

- Define expected work performance outcomes
- Define acceptable level of performance required of an employee to perform effectively in his workplace
- Provide behavioural-based descriptors of performance
- Indicate knowledge a competent employee must have
- Illustrate types of evidence an employee must show to prove competence
- Describe conditions and context under which the employee should demonstrate the expected level of job performance
- Are endorsed by employers and validated by industry in meeting minimum standards in job performance

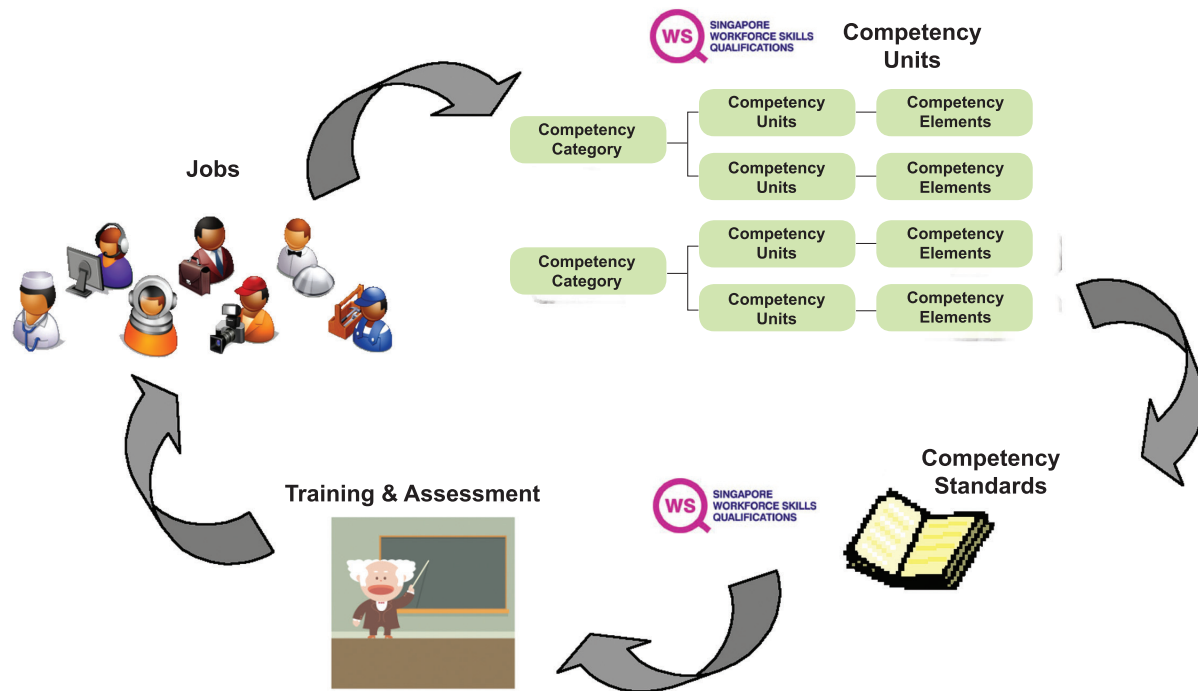
You would often hear / see the two terms used as follows:

What are the performance expectations of this **competency unit**? Can I see the **competency standard** for this unit?

What are the core and elective **competency units** required in this WSQ qualification?

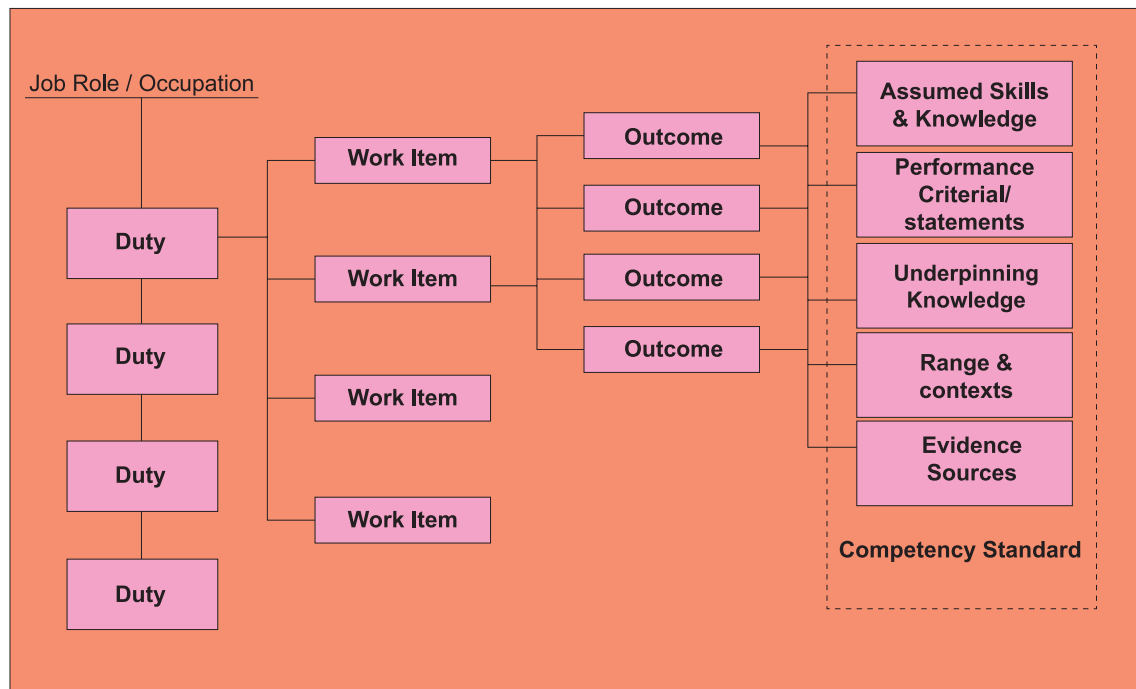
Can you forward me the relevant **competency standard** to develop the courseware?

In essence, a WSQ competency standard is the reference document of a competency unit. The relationship between a competency unit and a competency standard is similar to that between a course title and the course materials. The WSQ competency unit that the competency standard is written for is indicated on the cover page of the competency standard. The contents articulated in a WSQ competency standard provide the basis for an employee to be trained and certified competent in a WSQ competency unit.



WSQ COMPETENCY STANDARD - DEFINING A COMPETENCY UNIT

A WSQ competency standard states performance standards that are validated and endorsed by industry to be the minimum performance standards for the industry. A WSQ competency standard documents expected work performance outcomes, expected level of performance, knowledge that supports the delivery of work performance outcomes and work contexts under which the work performance outcomes are to be delivered. The contents of a WSQ competency standard are derived from task analysis:





Development Of A Competency Standard

The following questions are used to guide the task analysis to ensure that all the information that is required to be captured in a competency standard is obtained:

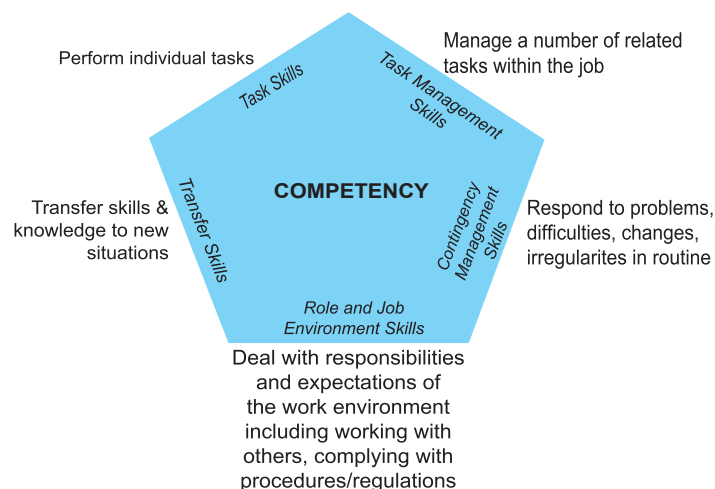
- What are the work items?
- What do the work items entail?
- What are the outcomes of the work items?
- How well must the work outcomes be achieved?
- Can the work items be completed by an individual employee?
- Do the work items have clear start and end points?
- What skills and knowledge are needed to perform the work items?
- What level of skills and knowledge is needed?
- Under what types of work situations are the work items carried out?
- What are the tools, documents, equipment and supporting organisational resources required to carry out the work items?
- Can the skills and knowledge be acquired in bite-sized² modular training programme?
- What evidence is needed to prove that a person is competent?
- What generic work skills are needed?
- How and from where should evidence be gathered?
- What resources are required to gather the evidence?

² Bite-sized is defined as at least one full day of training (7 hours) or not exceeding one month of training (120 training hours).

WSQ COMPETENCY STANDARD - DEFINING A COMPETENCY UNIT

The documentation of the information gathered from task analysis in a WSQ competency standard is guided by the following:

- Work items are completed by one individual employee
- Work items have clear start and end points
- Performance standards are stated clearly and explicitly so that employers, employees, individuals and training providers know exactly the expected performance outcomes and levels of performance
- Observable and measurable behavioural and / or product outcomes that can be readily assessed are provided.
- Changing technologies and processes are taken into account
- Performance standards are benchmarked against international standards
- Knowledge, skills and performance standards can be delivered in 'bite-sized' training sessions
- Knowledge, skills and performance standards stated are appropriate to the WSQ competency level³ selected for the competency unit.
- The five competency dimensions are addressed:
 - Task skills (*skills, knowledge and attitudes (KSA) directly relevant and attributable to a work item*)
 - Task management skills (*KSA in relation to managing different aspects / sub-tasks of a work item simultaneously and/or sequentially*)
 - Contingency management skills (*KSAs required to handle non-routine and unexpected situations that would arise with the execution of a work item*)
 - Role and job environment skills (*KSAs required for individual to relate a work item with his / her job role in entirety*)
 - Transfer skills (*KSAs required for individual to execute work item in more than one work context or situation*)



³ WSQ these competency levels are pegged to occupational hierarchy and differentiated by range and complexity of work items, accountability and autonomy. Appendix B provides the descriptors of WSQ competency levels

Five Dimensions Of Competency In Action

An example of five dimensions of competency of a work item is as follows: a nurse who draws blood from adult patients and sends the samples for testing.

Task Skills	The nurse is able to use the appropriate equipment to draw the blood safely from the adult patient.
Task Management Skills	In addition to drawing blood, the nurse knows how to dispose of the used syringe.
Contingency Management Skills	If the syringe breaks while the nurse is drawing blood, the nurse knows how to handle the situation.
Role and Job Environment Skills	In addition to drawing blood, the nurse is able to communicate with fellow colleagues such as alerting them if a patient feels very ill.
Transfer Skills	The nurse is able to transfer his / her skills of drawing blood from an adult patient to that of a baby.

Source: Learner's guide of WSQ course on "Interpret the Singapore Workforce Skills Qualification Framework", Institute for Adult Learning (IAL).

Validation Of Competency Standards

WSQ competency standards are validated and endorsed by representatives of the industry before release for use by key user groups. A WSQ competency standard would be reviewed at least once every three years to ensure currency and relevance to the industry. During the documentation of competencies into competency standards, due diligence is practised to ensure currency, accuracy, relevance and clarity. The numerous rounds of validation with industry representatives and internal endorsement processes by WDA's framework support group are two key measures to safeguard the quality of WSQ competency standards.

Competency Standards Come In Various Formats



WSQ competency standards appear in different formats depending on the needs of the industry. There are two main different formats - one that documents performance outcomes as 'Competency Elements' and 'Performance Criteria' (Annex C) and one that documents performance outcomes as 'Performance Statements' (Annex D). The format that uses 'Performance Statements' was developed later for documenting work performance outcomes of professional occupations and competency units that are pegged to WSQ Diploma and above levels. The work performance outcomes tend to be less micro because the work items are less procedural in nature; such that it is difficult to standardise minute work performance outcomes across the industry. WSQ Frameworks that have used this format are Creative Industries, InfoComm Technology and Wafer Fabrication.

Comparatively, the performance outcomes of work items that are pegged to lower WSQ competency levels can be more easily standardised since the work procedures can be easily generalised across industry; work performance outcomes can be further grouped into competency elements that correspond to major sub-tasks. WSQ Frameworks that have used this format are Precision Engineering, Aerospace MRO, Retail, Tourism and Healthcare Support.

WSQ COMPETENCY STANDARD - DEFINING A COMPETENCY UNIT

Organisation Of Information In A Competency Standard

The key components of a WSQ competency standard are illustrated as follows:

 <p>WSQ Competency Standard (CS) Cover Page</p>	WSQ Framework	WSQ Framework which the competency standard was developed for
	Competency category	Classification of CS based on type of industry activities
	Competency level	WSQ level of complexity of tasks (Appendix B)
	Competency title	Competency unit title which reflects contents of CS.
	Competency code	Unique identification code of competency unit
	Recommended Training Hours	Estimated average duration for an employee to acquire skills and knowledge in CS
	Recommended Assessment Hours	Estimated average duration required for assessment
	Credit value	Derived from recommended training and assessment hours. Indicative of 'size' of competency unit.
 <p>WSQ Competency Standard (CS) Key Contents</p>	Overview	Summary of contents
	Occupations / Target Group	Personnel who perform work items described in CS
	Assumed skills & knowledge	Skills and knowledge that learner should possess prior to training for CS
	Underpinning knowledge	Knowledge to support performance of tasks
	Performance criteria / statements	Performance standards / level required of learners
	Range & contexts	Situations under which work items are performed
	Evidence sources	Activities, materials and documents that can determine competence of learner

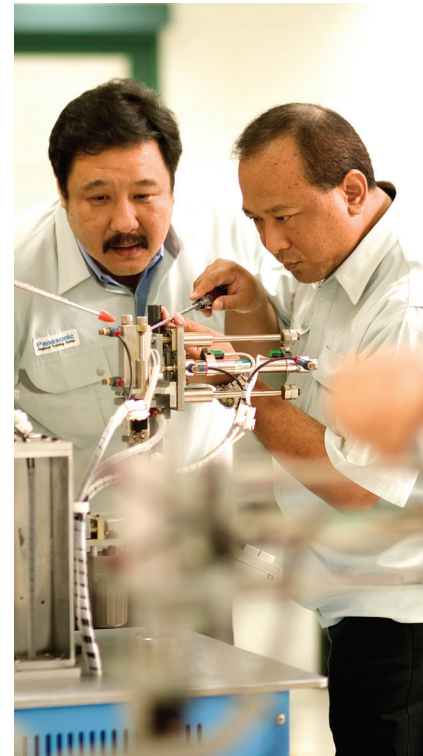
The above components of the key contents may be grouped into competency elements that denote the sub-tasks or key activities of a work item.

If the contents of a competency standard are not accurately identified, there is a serious risk that training will produce individuals who cannot perform their work at a required level of proficiency (standard). However, it is important to acknowledge the potential limitations of documenting work performance outcomes and KSA into competency standards:

- In order to cater for multiple workplace contexts, the information included (performance criteria / statement, underpinning knowledge, etc) is usually based on general practices. Thus, it may not be applicable to all workplace contexts with unique requirements.
- The attempt to chunk job tasks into bite-size units may be done at the expense of not being able to present a holistic view of a particular job function / role.
- The explosion of new knowledge and technologies pose challenges to the maintenance of the currency of competency standards.

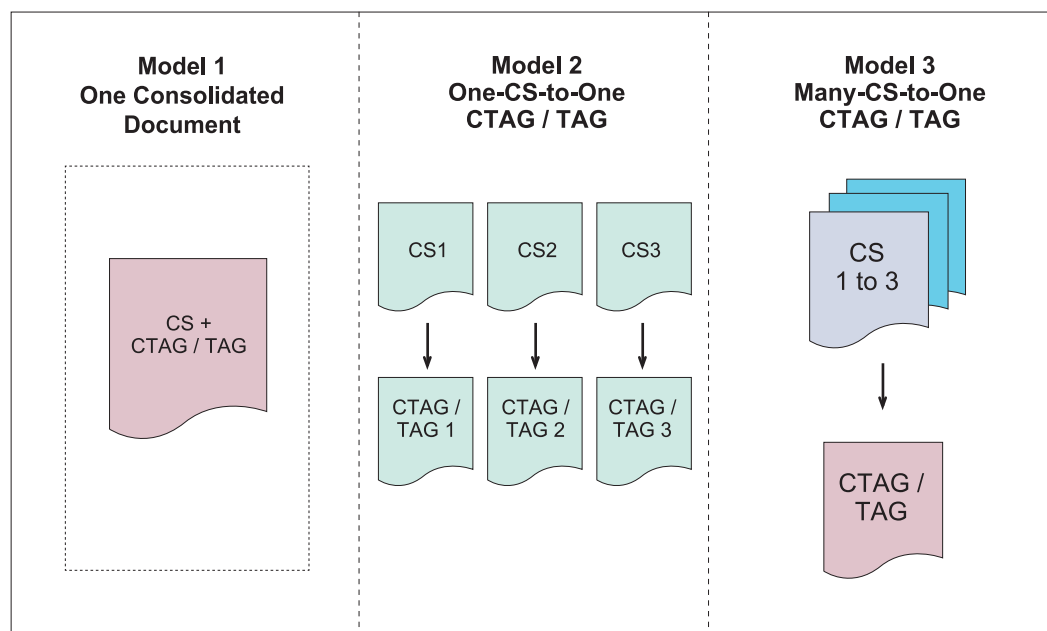
The usage of competency standards for the intended purposes stated on page 5 must be carried out with the understanding and acceptance of the potential limitations stated above.

The next two sections will look at how CET personnel translate the contents in competency standards into training and assessment programmes.



WSQ CURRICULUM, TRAINING AND ASSESSMENT GUIDE (CTAG) / TRAINING AND ASSESSMENT GUIDE (TAG)

Competency standards are accompanied by Curriculum, Training and Assessment Guides (CTAGs) or Training and Assessment Guides (TAGs). CTAGs / TAGs may be written for a competency unit as an extension of a competency standard or a separate document from the competency standard. CTAGs / TAGs may also be written for a range of competency units.



Move Towards Integrated CTAG

The more recent CTAGs / TAGs are adopting model 3 where advice on training and assessment development and delivery for multiple competency units are addressed in one CTAG / TAG. So that developers would adopt a more holistic view of competencies and how competencies are related to one another and to the entire job scope of an employee. Advice on addressing a combination of competency units in an integrated training and assessment programme is also more explicit.

CTAGs / TAGs provide information for course developers to interpret and translate competency standards into training and assessment programmes. The key components of a CTAG / TAG are:

General introduction:

- What WSQ training and assessment is
- Overview of framework

Trainer & assessor requirements:

- Technical certification
- Relevant work experience
- Adult educator certification

Curriculum and delivery advice:

- Range of learning strategies,
- Proposed sequence of delivery,
- Topics to cover,
- Contextualisation

Assessment advice:

- Assessment principles
- Purpose & features of assessment plans
- Recommended assessment methods
- Types of evidence to collect

Workplace safety & health requirements

Resources (texts, websites, journals)

DESIGNING WSQ TRAINING & ASSESSMENT - REFERENCING TO COMPETENCY STANDARDS

WSQ accredited training and assessment programmes provide knowledge and skills for occupations or professional knowledge and skills to enable individual employees to achieve the desired work performance outcomes stated in the WSQ competency standards. WSQ assessments refer to processes of determining and certifying an individual employee is able to achieve the stated work performance outcomes.

WSQ training and assessment are viewed as processes that help individuals to achieve the work performance outcomes stated in the competency standards, under certain work situations as defined by the range and context items, and acquire necessary knowledge as stated as the underpinning knowledge items that would support the achievement of the work performance outcomes.



Alignment Of Programme To WSQ Is Beyond Checking Off Items In A Competency Standard

The developers of the WSQ training and assessment programmes have to ensure that the strategies and contents of their programmes are aligned to the WSQ competency standards. Developers would need to study the WSQ competency standards in detail and understand the expected work performance outcomes that an individual should demonstrate in order to be certified competent.

It is important to note that alignment to WSQ competency standards does not mean simply checking-off of performance criteria / statements (PCs / PSs), underpinning knowledge (UK) items, range and context (R&C) items in the competency standards. It does not mean blindly following the sequence of PCs / PSs, UK and R&C without understanding the overall intended expected performance of a competent professional, the five competency dimensions, the job / occupational requirements and industry / organisational requirements.

WSQ Programmes Are About What Is Required At The Workplace

So, while designing training programmes on particular job tasks, the developer must not lose sight of the eventual outcomes of a competent professional. Developers would adopt appropriate training and assessment strategies that will address all dimensions of competency (*task skills, task management skills, contingency management skills, role and job environment skills, and transfer skills*), fulfill requirements of the learner's occupation and requirements of the learner's organisation and industry. The PCs / PSs, UK and R&C items in the WSQ competency standard would be used to derive the learning outcomes of a programme. The learning outcomes would have to be made relevant based on the understanding of the learner's occupation, organisational and industry requirements.

Take the example of the nurse presented on page 13, who is required to draw blood. The programme's primary learning outcome is to equip the nurse with KSA of drawing of patients' blood. There will be other learning outcomes that would correspond to key procedural steps that the nurse would have to perform in order to be able to draw blood successfully such as preparing the patient and conforming to safety requirements. And taking into account a nurse's occupational requirements, the programme would also train the nurse on managing patients, managing events and incidents (such as broken syringes, unwell patients, communicating to colleagues), and to draw blood from different types of patients (such as children and adults); these learning outcomes are all directly related to the main work item of drawing patients' blood.

The training and assessment process and materials developed must enable the learners to actively participate in the learning process which means that the profile of the learners has to be considered in the design and development of training and assessment. In this regard, a developer or team of developers of WSQ training and assessment programmes are required to be subject matter experts as well as trained in curriculum and assessment design.

There are many ways of designing WSQ programmes based on WSQ competency standards.

- Programme based on single WSQ competency unit
- Integrated programme with multiple WSQ competency units
- Full qualification programme with full suite of WSQ competency units

DESIGNING WSQ TRAINING & ASSESSMENT - REFERENCING TO COMPETENCY STANDARDS



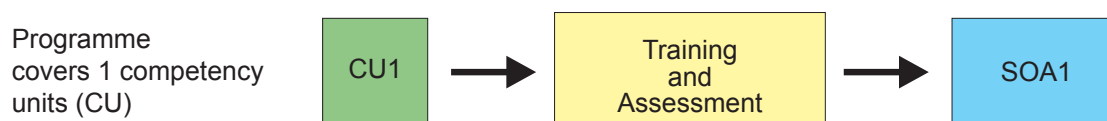
Designing Programme For Single Competency Unit

This type of programme is developed based on one competency unit. This kind of programme will only cover the competency requirements stated in the competency standard document for one competency unit. This type of programme would be suitable for learners who want to obtain 'top up' to specific competencies that he / she feels is lacking.

The sequencing of the learning and assessment contents need not follow the sequence of performance criteria / statements in the competency standard. Learning and assessment topics and activities would be selected and developed based on the competency requirements stated in the competency standards. These learning and assessment topics and activities would be sequenced in a manner most logical and coherent to the needs and profile of learners. Learning and assessment would also take into consideration needs of the organisation, industry and individuals so that the programme can be contextualised and make relevant to the learner.

For example in the case of designing a programme to train a nurse to draw blood from a patient, the developer would want to understand the procedures (SOP) of drawing blood of the hospital / clinic that the nurse is working for. The developer would design the training programme according to the hospital's / clinic's SOP so that learners would be readily deployed at their job after training. The developer would also notice that there are common threads among the competency elements and performance criteria / statements, such as safety requirements and measures (donning of appropriate safety apparel like safety gloves and apron, disposal of used syringes, clearing of blood stains, etc.), and choose to cover knowledge of safety requirements at the beginning of the course and then reinforcing this knowledge and safety procedures at relevant points of the training programme. The developer would develop the assessment plan according to the hospital's / clinic's SOP.

The duration of training and assessment would correspond to the recommended training and assessment hours indicated in the competency standard and may vary slightly according to the specific profile and needs of the learners⁴. When a learner has successfully completed the training programme, the learner will be awarded a WSQ Statement of Attainment (SOA) for the specific competency unit. The learner can obtain one SOA at a time for different programmes until all necessary WSQ SOAs are collected so that the learner would be awarded a full WSQ qualification certificate.



⁴ The recommended training and assessment hours (RTAH) are indicative of the maximum number of hours that would be funded by Skills Development Fund (SDF). The SDF funding will be capped at the RTAH for WSQ programmes.

Designing Integrated Programme For Multiple Competency Units

Depending on the needs of the learner, employer and industry, training and assessment programmes can be designed to cover the contents of a few WSQ competency units. These are referred to as integrated programmes that combine the competency requirements of multiple competency units into one training and assessment module. Usually, competency units that are complementary, that are related to the same occupation or group of jobs are selected to be delivered in an integrated programme.

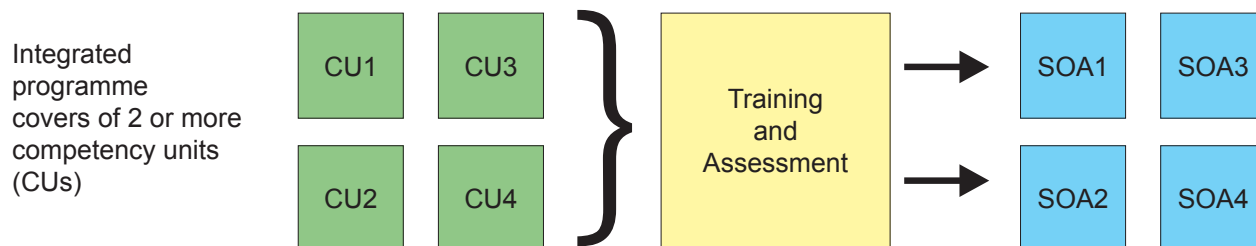
As with programmes addressing single competency unit, the sequencing of the learning and assessment content in an integrated programme need not follow the sequence of competency requirements in the competency standards. Effort is required to analyse the content of the different competency units to identify overlapping content and to see how the different competency requirements can be synergised for effective learning to take place. Organisational, industry and learner needs are taken into consideration and learning and assessment content would be arranged and contextualised in a manner deemed most appropriate and logical for learners so that the integrated programme would be meaningful and effective for the learners.



Because competency units in an integrated programme tend to be complementary, some of the performance requirements in the competency units would be repeated. Learning outcomes would be derived from PCs / PSs, UK and R&C of the selected competency units. It is not necessary to repeat similar / same learning outcomes derived from across competency units based on the number of times they are mentioned in the competency units. Developers would sequence the learning outcomes logically and present it so that the integrated programme is seen as one comprehensive programme in entirety rather than a programme that is structured according to the discrete competency units it covers. Learning and assessment content addressing repeated performance requirements need not be delivered multiple times in an integrated programme. Learning and assessment strategies should ensure that the learning and assessment content would be addressed at least once and in a manner that reinforces retention by learners.

The duration of an integrated programme need not be the sum of the recommended training and assessment hours of all the competency units addressed in the integrated programme. It could be shorter than the sum in cases where there are competency requirements that are repeated across competency units addressed by the integrated programme. Learners who complete the integrated programme will be awarded the number of WSQ SOAs corresponding to the WSQ competency units covered in the integrated programme. Learners can move on to other WSQ competency units to eventually obtain all the required WSQ SOAs to be awarded a full WSQ qualification certificate.

DESIGNING WSQ TRAINING & ASSESSMENT - REFERENCING TO COMPETENCY STANDARDS

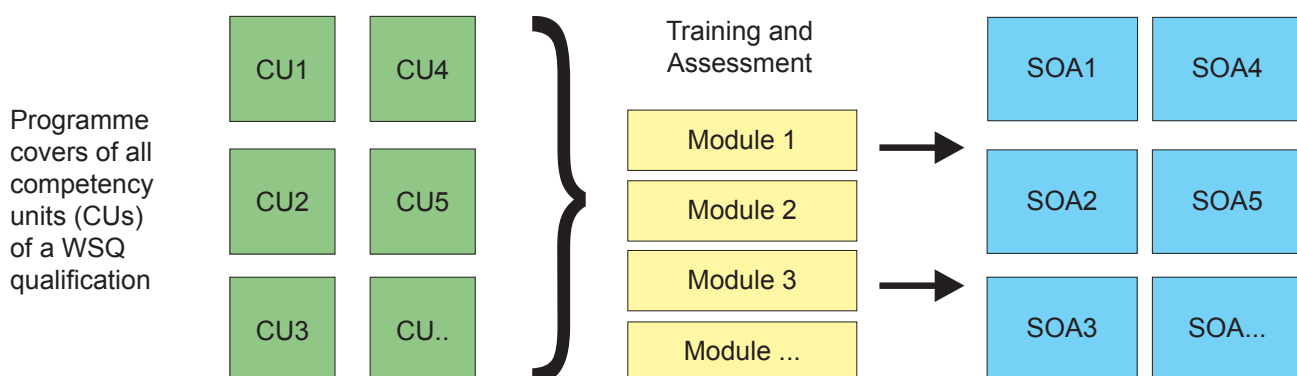


Competency units can be combined based on commonalities among the competency units such as key attributes or competency categories. In the case of Creative Industries WSQ, competency units that promote idea generation may be delivered under one training programme or competency units that are grouped under the competency category of marketing and promotion may be delivered under one training programme. The combination of competency units may also be done according to the specific training needs of learners and these competency units may be from different competency categories or key attributes. In the case of Training WSQ, the competency units on adult learning theories application (ACTA⁵ CU2), curriculum design (ACTA CU3) and assessment design (ACTA CU5) may be delivered under an integrated programme because curriculum developers are often required to be able to apply adult learning theories in the design and development training materials and assessment schemes.

Any combination of competency units in the development of a training module is possible. However, learners should not be made to go through the same competency unit again as they progress from one training module to another once they have acquired the WSQ SOA (even if they have obtained the WSQ SOA from a different training provider). As such, provisions would be made to exempt learners from having to attend training and assessment for the same competency unit again once they have been assessed to be competent for that competency unit.

Designing Full Qualification Programme For A Suite Of Competency Units

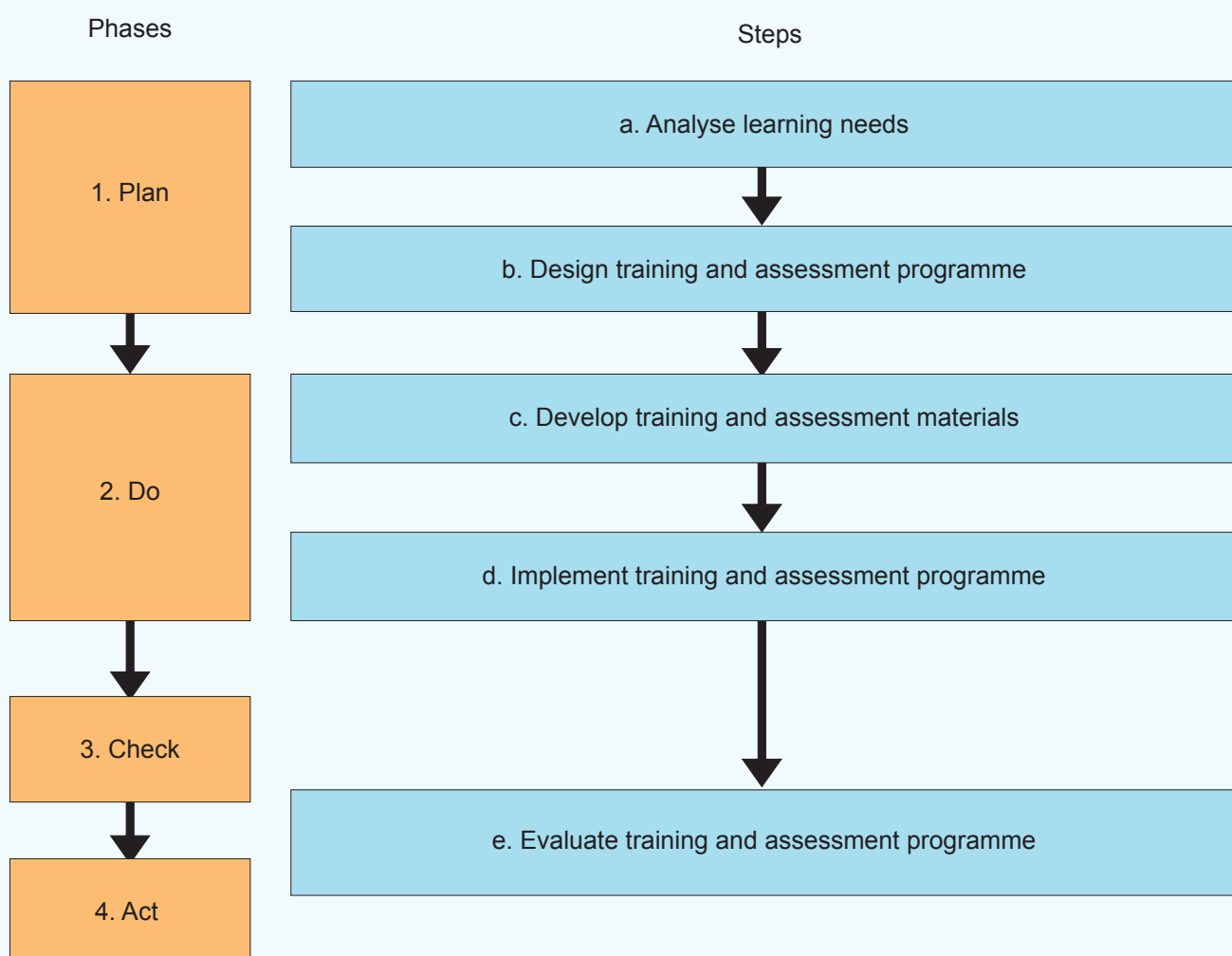
This type of programme is similar to the integrated programmes explained above. Integrated programmes package selected competency units within the qualification into one learning module. A full qualification programme attempts to package all competency units within the full qualification into multiple learning modules that address single competency units and/or that are integrated.



⁵ ACTA - Advanced Certificate in Training and Assessment

DESIGNING WSQ TRAINING & ASSESSMENT – CURRICULUM DEVELOPMENT PROCESS

The WSQ resources that provide key information and serve as reference points for developers to develop WSQ training and assessment programmes are WSQ competency standards and CTAGs. Supplementary information includes occupational, organisational and industry contexts. The phases and steps of curriculum development are as follows:



DESIGNING WSQ TRAINING & ASSESSMENT – CURRICULUM DEVELOPMENT PROCESS

To address the heart of the issue which is to ensure WSQ learners are competent individuals, it is important for CET personnel to understand the holistic learning outcomes of a competent individual when designing WSQ training and assessment. The pertinent questions to answer on the onset and throughout the process of curriculum development by developers are:

Can the individual perform the work items effectively to the level articulated in the competency standards?

Can the individual fulfill the requirements of his / her job / occupation?

Can the individual fulfill the requirements of his/her organisation or industry?

Is the employability of the individual enhanced through WSQ training and assessment?

Is a WSQ certified individual a better-performing individual?



Phase 1. Plan The Curriculum Development

a. Analyse Learning Needs

The rationale and relevance of the content of a WSQ training and assessment programme must be carefully thought through in the curriculum development process. A proper analysis and needs assessment would prevent unnecessary wastage of resources spent on developing a WSQ training and assessment programme.

An analysis and needs assessment should be conducted upfront to identify the specific performance problems that require a training solution. Once this is established, developers can then examine the content coverage in the competency standards carefully to identify the competency units that would address the performance problem. The competency units selected can then be packaged into relevant learning modules (that cover single or multiple competency units) to address the specific performance problems in a targeted manner.

Further analysis at the organisational and individual learner level would provide information on the specific requirements of the organisation and the profile and characteristics of the learners and help determine detailed performance issues that can be addressed by training. Such an analysis ensures that the training and assessment programme would be tailored to the specific needs of learners to help them address their performance problems.

b. Design The Training And Assessment Programme

Based on the findings of the needs analysis phase, the specific learning objectives and assessment outcomes of the training and assessment programme are established. The learning objectives and assessment outcomes should match the competencies covered in the selected competency unit(s).

Training and assessment strategies, topics and activities that are most appropriate for the learners are determined. The training lesson plans and assessment plan is derived with proper sequencing of training and assessment content. Duration of the programme is confirmed. Training resources such as media, facilities are identified and the requirements of trainers and assessors are also confirmed.

The designing of the WSQ training and assessment programme should also take into account the level of competency required as described in the WSQ Competency / Qualifications Level Descriptors (Appendix B), the five dimensions of competency, occupation, organisational and industry needs, so that the programme is contextualised to learner, organisational and industry needs.

DESIGNING WSQ TRAINING & ASSESSMENT – CURRICULUM DEVELOPMENT PROCESS



Phase 2. Do The Curriculum Development

c. Develop Training And Assessment Materials

When the training and assessment design is finalised, developers would develop courseware, learning materials, resources, assessment instruments, assessment criteria and marking schemes. The contents of the training and assessment materials would be guided by the learning objectives and assessment outcomes laid out in the training and assessment design. Key considerations also include the articulation of training and assessment contents that resonate with the required WSQ competency level stipulated on the WSQ competency standards, five dimensions of competency and occupational, organisational and industry needs.

Guides and instructions would be developed to provide clarity to trainers and assessors on the specifics of training delivery and conduct of assessment. This ensures that training delivery and conduct of assessment is consistently implemented across trainers and assessors. Guides and instructions would also be provided to help trainers and assessors to contextualise the training and assessment according to the needs of learners, occupation, organisation and industry without comprising on the coverage of competencies stated in the WSQ competency standards.

It is recommended that the set of training and assessment materials are piloted and validated, to allow fine-tuning before the training and assessment programme is finalised and submitted for accreditation to be recognised as a WSQ training and assessment programme. When a training and assessment programme is accredited, it has been checked that it meets the competency requirements of WSQ competency standards and CTAGs / TAGs, learners' needs and occupational, organisation and industry needs.

d. Implement Training And Assessment Programme

The accredited WSQ training and assessment programme would be delivered by qualified trainers and assessors. The specific requirements and qualifications of WSQ trainers and assessors are stipulated in the CTAG / TAG. Qualified trainers and assessors would be trained and briefed so that they are well-prepared and well-versed with the training and assessment programme prior to them being deployed to train and assess learners.

The training delivery by trainers and conduct of assessments by assessors would be closely monitored and validated to ensure that trainers and assessors adhere to the training and assessment programme design to ensure consistency and integrity of WSQ training and assessments. There would be a system to actively obtain and analyse feedback from learners so that the training and assessment programme can be reviewed and improved upon.

Phase 3. Check The Training And Assessment

e. Evaluate Training Delivery And Assessment Conducted

The observations gathered during monitoring sessions and validations sessions of training and assessment, and the feedback received from learners would be analysed to determine areas for improvement for training and assessment. Areas for improvement would be classified according to training and assessment materials, training delivery, conduct of assessment, trainer and assessor performance and other aspects (duration, facilities, etc.)

Evaluation of WSQ training and assessment programmes can also be conducted to determine retention of learning and acquirement of new competencies based on WSQ SOA achievements (assessment passing rate), transfer of learning at workplace, impact on business performance, so that the design of WSQ training and assessment programmes can be enhanced.



Decisions to improve and enhance the WSQ training and assessment programme would be based on practicality and scalability of the changes according to the requirements of the WSQ competency standards, learner, occupational, organisational and industry requirements.

Phase 4. Act On The Training And Assessment

Based on the analyses conducted during the evaluation stage, enhancements to the WSQ training and assessment programmes would be made. The enhanced programme would be implemented and tracked again to ensure that the enhanced WSQ programme has achieved the desired impact that the changes were meant to make.

DESIGNING WSQ TRAINING & ASSESSMENT – CURRICULUM DEVELOPMENT PROCESS

The process in designing WSQ training and assessment is summarised as follows:

Cycle (PDCA)	Process (ADDIE)	Key Activities	Resources
1. Plan	a. Analysis	<ul style="list-style-type: none"> Establish problem that can be solved by training Clarify instructional objectives and outcomes Determine training needs of learners Assess current knowledge and skills of learners Assess profile / characteristics of learning 	<ul style="list-style-type: none"> Training needs analysis tools Performance evaluation tools <p>WSQ</p> <ul style="list-style-type: none"> Competency standards <p><i>Specific information:</i></p> <ul style="list-style-type: none"> Occupations / target group Assumed skills and knowledge Performance criteria / statements Underpinning knowledge Range and contexts <p><i>Considerations:</i></p> <ul style="list-style-type: none"> Job / occupation scope Industry / organisational needs
	b. Design	<ul style="list-style-type: none"> Determine learning objectives Determine assessment outcomes Determine training and assessment strategies Determine topics and contents to be covered in training and assessments Sequence topics and assessment activities Plan lessons and assessments Confirm duration Select training and assessment media and facilities Contextualise training and assessment design to specific needs Identify trainers and assessor requirements 	<ul style="list-style-type: none"> Organisational procedures Industry practices Learner profiles <p>WSQ</p> <ul style="list-style-type: none"> Competency standards CTAGs / TAGs <p><i>Specific information:</i></p> <ul style="list-style-type: none"> WSQ competency level Performance criteria / statements Underpinning knowledge Range and contexts Evidence sources Recommended training and assessment hours Trainer and assessor requirements Curriculum, delivery and assessment advice Workplace safety & health requirements <p><i>Considerations:</i></p> <ul style="list-style-type: none"> Five competency dimensions WSQ competency level Job / occupation scope Industry / organisational needs

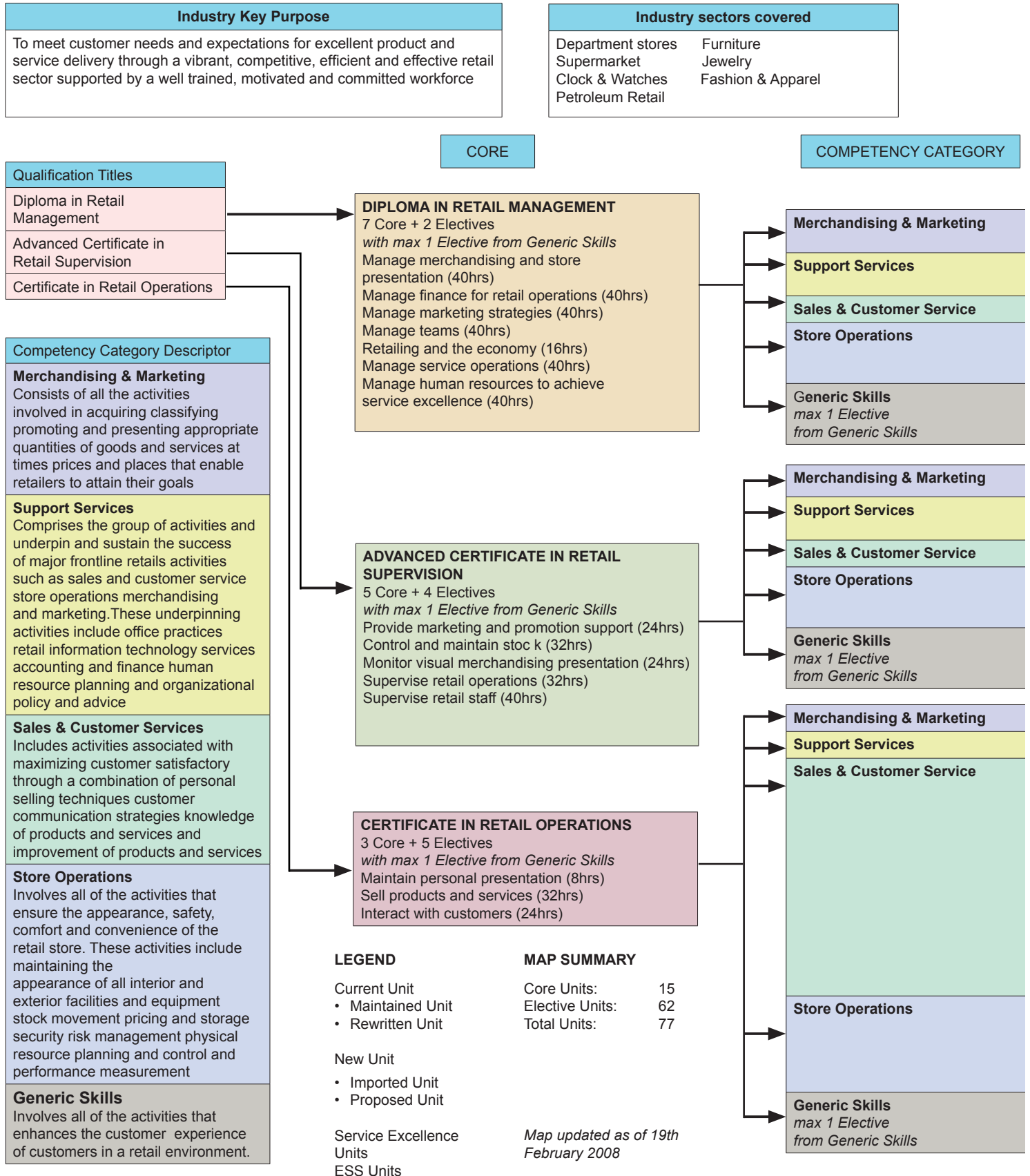
Cycle (PDCA)	Process (ADDIE)	Key Activities	Resources
2. Do	c. Development	<ul style="list-style-type: none"> • Create training materials and assessment tools, instruments • Create assessment criteria marking schemes • Create guides and instructions for trainers and assessors • Contextualise training and assessment materials to specific needs • Pilot and validate training and assessment materials • Refine training and assessment materials 	<ul style="list-style-type: none"> • Organisational procedures • Industry practices • Learner profiles <p>WSQ</p> <ul style="list-style-type: none"> • Competency standards • CTAGs / TAGs <p><i>Specific information:</i></p> <ul style="list-style-type: none"> - Competency level - Performance criteria / statements - Underpinning knowledge - Range and contexts - Evidence sources - Recommended training and assessment hours - Curriculum, delivery and assessment advice - Workplace safety & health requirements <p><i>Considerations:</i></p> <ul style="list-style-type: none"> - Five competency dimensions - WSQ competency level - Job / occupation scope - Industry / organisational needs
	d. Implementation	<ul style="list-style-type: none"> • Train the trainers and assessors • Deliver training • Conduct and mark assessments • Collect feedback on training an assessment 	<ul style="list-style-type: none"> • Course evaluation forms • Training and assessment observation forms • Train-the-trainer / assessor sessions <p>WSQ</p> <ul style="list-style-type: none"> • Competency standards (<i>as information to employees and trainees</i>) <p><i>Considerations:</i></p> <ul style="list-style-type: none"> - Five competency dimensions - WSQ competency level - Job / occupation scope - Industry / organisational needs

DESIGNING WSQ TRAINING & ASSESSMENT – CURRICULUM DEVELOPMENT PROCESS

Cycle (PDCA)	Process (ADDIE)	Key Activities	Resources
3. Check	e. Evaluation	<ul style="list-style-type: none"> Analyse feedback on training and assessment Conduct validation sessions for training and assessment 	<ul style="list-style-type: none"> Course evaluation forms Training and assessment observation forms Validation reports <p><i>Considerations:</i></p> <ul style="list-style-type: none"> Training needs analysis Job / occupation scope Industry / organisational needs
4. Act		<ul style="list-style-type: none"> Refine training and assessment programme design Refine training and assessment materials 	<ul style="list-style-type: none"> Organisational procedures Industry practices Learner profiles <p>WSQ</p> <ul style="list-style-type: none"> Competency standards CTAGs / TAGs <p><i>Specific information:</i></p> <ul style="list-style-type: none"> Competency level Performance criteria/ statements Underpinning knowledge Range and contexts Evidence sources Recommended training and assessment hours Curriculum, delivery and assessment advice Workplace safety & health requirements <p><i>Considerations:</i></p> <ul style="list-style-type: none"> Five competency dimensions WSQ competency level Job / occupation scope Industry / organisational needs

APPENDIX A
Singapore Retail WSQ Competency Map

Appendix A - Singapore Retail WSQ Competency Map





Typical Job Titles		
MANAGERIAL LEVEL Shop Manager, Merchandising Manager, Operations Manager, Chain Store Manager, Department Manager, Commercial Manager, Area Manager, Store Manager	SUPERVISORY LEVEL Supervisor, Foreperson, Forecourt Captain, Team Leader, Senior Sales Assistant, Retail Supervisor	OPERATIONS LEVEL Cashier, Retail Sales Assistant, Retail Assistant, Sales Associate, Service / Pump Attendant, Sales Promoter

Y ELECTIVE

Manage the buying function (32hrs) Buy merchandise (40hrs)	Control inventory (32hrs) Manage promotional activities (32hrs)
Manage retail office operations (24hrs) Manage the training and assessment system (32hrs)	Manage customer relationships (CRM) in a retail environment (40)
Manage an online retail business (32hrs)	Manage sales operations (32hrs)
Manage and maintain store facilities (32hrs) Manage compliance with food and beverage safety and hygiene policies and procedures (24 hrs)	Set up a retail business (32hrs) Manage store security (16hrs) Manage workplace safety and health systems (24hrs)
Service Excellence Framework (other than units already imported into the retail competency map)	Employability Skills System units

Apply legal legislation related to the retail industry (16hrs) Conduct competency-based assessment (14hrs)	Prepare and Facilitate On-The-Job Training Programme (21hrs) Prepare and Facilitate Classroom Training Programme (21hrs)
Coordinate interaction with customers (24hrs)	
Supervise petroleum retail operations (24hrs) Supervise housekeeping standards (24hrs) Conduct food and beverage hygiene audit (24hrs)	Perform wet stock (fuel) inventory and tanker discharge duties (16hrs) Maintain store security (16hrs) Maintain workplace safety and health policies and procedures (24hrs)
Service Excellence Framework (other than units already imported into the retail competency map)	Employability Skills System units

Handle merchandise display (24hrs)	
Working in the retail industry (12hrs)	
Perform colour and silhouette coordination (16hrs) Perform point of sale operations (24hrs) Handle retail after sales service (16hrs) Perform product demonstration (24hrs) Provide advice on furniture products (16hrs) Provide advice on clocks and watch products (16hrs) Provide advice on electrical and electronic goods (16hrs) Provide advice on fashion and apparel (16hrs) Provide advice on lingerie (16hrs) Provide advice on footwear (16hrs) Apply colour theory (8hrs) Provide advice on wines (24hrs) Provide advice on baby products (16hrs)	Provide advice on make-up (16hrs) Provide advice on skin care (16hrs) Provide advice on body care (16hrs) Provide advice on fragrances (16hrs) Provide advice on deli products (8hrs) Provide advice on dairy products (8hrs) Provide advice on seafood products (8hrs) Provide advice on meat products (8hrs) Provide advice on precious metals (24hrs) Provide advice on diamond (24hrs) Provide advice on gemstone (24hrs) Provide advice on jadeite (24hrs)
Handle product storage operations – fresh produce (24hrs) Handle product storage operations – fresh meat (24hrs) Handle product storage operations – seafood (24hrs) Perform stock control operations (16hrs) Perform petroleum retail station duties (24hrs)	Respond to petroleum retail station emergencies (24hrs) Demonstrate first aid/ cardio-pulmonary resuscitation (CPR) Skills (24hrs) Follow food and beverage hygiene policies and procedures (12hrs) Apply security practices (16hrs) Comply with workplace safety and health policies and procedures (16hrs)
Service Excellence Framework (other than units already imported into the retail competency map)	Employability Skills System units

APPENDIX B
WSQ Competency / Qualifications Level
Descriptors

Appendix B - WSQ Competency / Qualifications Level Descriptors

Competency/ Qualifications Level	Learning Outcomes
<p>Level 6</p> <p>Graduate Certificate / Graduate Diploma</p>	<p>Ability to apply, integrate and contextualize skills and knowledge in a broad range of professional or specialist work activities in complex and changing contexts. The knowledge acquired is highly sophisticated and evolved through original research. It assumes that the learning requires a degree or diploma foundation, and industry experience at a high level. Work activities comprise tasks involving a high level of organizational and resource management, with full accountability and autonomy for own and others' processes and outputs within very broadly defined boundaries. Activities are mainly self-directed requiring a significant degree of strategic thinking and judgment. Work problems are mainly non-routine, complex and multifaceted in nature and are addressed through using tried and tested conceptual frameworks and highly structured processes. The difference between Graduate Diploma and Graduate Certificate may be in breadth or depth within the field. Usually a Graduate Certificate involves six months full-time or one year of part-time; and Graduate Diploma one year full-time or two years part-time.</p>
<p>Level 5</p> <p>Specialist Diploma</p>	<p>Ability to apply, integrate and contextualize skills and knowledge in a range of complex technical or professional and specialist work activities in a variety of contexts, some of which are unpredictable. The knowledge acquired involves a strategic and critical understanding of current developments in the field of study and a number of related disciplines. Work activities comprise tasks involving substantial organizational and resource management, with full accountability and significant autonomy for own processes and outputs and others within defined boundaries. Activities are carried out under very minimal supervision requiring a significant degree of strategic thinking and judgment. Work problems are mainly non-routine, complex and multifaceted in nature involving application of a range of fundamental principles including analysis, diagnosis, designing, planning, execution and evaluation.</p>
<p>Level 4</p> <p>Diploma</p>	<p>Ability to apply and contextualize skills and knowledge in a broad range of high level technical or professional work activities in a wide variety of contexts. The knowledge acquired involves a sound understanding of theoretical concepts in the relevant field of study. Work activities comprise tasks involving a substantial degree of individual accountability and autonomy for self and others within broad boundaries. Activities are carried out under minimal supervision requiring a significant degree of judgment and decision-making. Work problems are mainly non-routine and emergent in nature and are preempted and/or addressed through well-deliberated guidelines.</p>
<p>Level 3</p> <p>Advanced Certificate</p>	<p>Ability to apply and contextualize skills and knowledge in a range of work activities, most of which are complex and non-routine in a variety of contexts. The knowledge acquired is procedural with elements of abstraction and theory. Work activities comprise tasks involving guidance of others and some planning and allocation of resources, e.g. supervisor and front-line manager, with considerable individual accountability and autonomy. Activities are carried out under general supervision requiring a significant degree of judgment. Work problems are mainly non-routine in nature and are addressed through new or adapted guidelines that are developed individually or collaboratively.</p>
<p>Level 2</p> <p>Higher Certificate</p>	<p>Ability to perform a range of work activities, some of which are non-routine and complex in a variety of contexts. The knowledge acquired is mainly factual or procedural with some understanding of relationships and associations. Work activities comprise tasks employing higher skills sets mainly undertaken by front-line supervisors involving some accountability within specified boundaries. Activities are carried out under frequent supervision requiring some judgment or reasoning. Work problems are mainly routine-based and addressed through established guidelines that are interpreted and applied arising from variations in work processes.</p>
<p>Level 1</p> <p>Certificate</p>	<p>Ability to perform a range of work activities, most of which are routine-based in a stable and predictable context. The knowledge acquired is mainly factual and procedural requiring basic comprehension skills. Work activities comprise basic tasks mainly undertaken by entry-level or operational occupations with some accountability within clearly specified boundaries. Activities are carried out under clear instructions and close supervision requiring minimal judgment. Work problems are mainly routine-based and addressed through established guidelines and standard operating procedures.</p>

APPENDIX C
Example Of Tourism WSQ Competency
Standard

NATIONAL COMPETENCY STANDARD TRAINING & ASSESSMENT GUIDE

INDUSTRY: Food and Beverage	COMPETENCY CATEGORY: Food and Beverage Production	COMPETENCY UNIT: Follow Food and Beverage Safety and Hygiene Policies and Procedures
REFERENCE NO: FB-RM-102C-0	EFFECTIVE DATE:	CLASSIFICATION: Operations
VERSION NO: 0 DATE: Mar 2006	NOMINAL TRAINING HOURS: 12	

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COMPETENCY STANDARD

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures

1. Unit Purpose

On completion of this unit, the learner will have the knowledge and application skills in following food and beverage safety and hygiene policies and procedures and be able to apply them to the workplace. This includes:

- maintaining personal hygiene
- maintaining food preparation and service utensils and equipment
- preparing food safely
- handling food safely
- storing food safely
- maintaining food preparation, service and storage areas

This unit is within the competency category of Food and Beverage Production and is one of the modules leading to the CET certificates.

2. Assumed Skills and Knowledge

This unit is linked to the following competency units, which provide the underpinning knowledge for building the required skills set.

References	Assumed Skills and Knowledge	Remarks
N/A	•	

3. Recognition of Prior Learning

People who have acquired skills and knowledge relevant to this unit through previous learning or work experience may be assessed for recognition of prior learning. Where skills and knowledge have been gained through experience, the applicant will need to provide evidence of competence. Documentary evidence of formal assessment, such as certification obtained under NSRS (National Skills & Recognition System) modules or other recognised certification bodies, should be provided by the applicant. Equivalent modules or courses include:

- National Environment Agency accredited Basic Food Hygiene Course
- FSS-002-3-0302 Maintain food quality and hygiene

4. Competency Description

- 4.1 **Knowledge Requirements** – lists the underpinning knowledge requirements for the competency unit; presented according to the competency element.
- 4.2 **Performance Requirements** – outlines the steps in the competency element, detailing how it should be performed, and including the range and context for each step in the performance criteria.
- 4.3 **Tools and Equipment** – identifies tools and equipment that may be required to perform the competency element.
- 4.4 **Regulations** – identifies regulations, legislation or legal requirements that may influence how the competency element is performed.
- 4.5 **Procedures** – describes procedures relating to the competency element to be performed.
- 4.6 **Interactions** – identifies individuals the learner may interact with during the performance of the competency element.
- 4.7 **Frequency** – describes how often the expected performance of the competency element is performed, based on the following guidelines:

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)*

- 4.7.1 Rarely - seldom or only occasionally performed
- 4.7.2 Regularly - performed regularly; every day or week
- 4.7.3 Frequently - performed often or frequently; more than once per day

The frequency of the performance will allow the training provider to determine the most appropriate training strategy to deliver this competency element.

- 4.8 **Criticality** – describes the level of importance pertaining to the performance of the competency element, based on the following guidelines:

- 4.8.1 **Very critical** - performance that is highly important to ensure successful performance outcomes; it is mandatory and must be stringently assessed
- 4.8.2 **Critical**- performance that is relatively important to ensure successful performance outcomes; this level must also be assessed
- 4.8.3 **Non-critical** - performance that is not important and makes no significant impact to performance outcomes; this level may be verbally assessed

The level of criticality determines the degree of emphasis to be placed in designing assessment framework and weighting for the competency element.

- 4.9 **Any Exceptions** – identifies any exceptions or options for performing the competency element.

5. Review Process

This document will be regularly reviewed to ensure continuing relevance and quality. This review will take place when there are changes in industry, such as industry developments, new technologies, work processes and legislation where applicable, or in response to feedback. The review process will involve the relevant Industry Skills & Training Council or equivalent.

Users of this unit can provide feedback to:

Feedback on Food and Beverage WSQ Competency Standards
Singapore Workforce Development Agency
1 Marina Boulevard #16-01
One Marina Boulevard
Singapore 018989

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)*

I Knowledge Requirements

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures

Competency Elements	Underpinning Knowledge	Cognitive Levels
1. Maintain personal hygiene •	<ul style="list-style-type: none"> w hat germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis • how foodborne illnesses are transferred • impact of good personal hygiene on prevention of foodborne illnesses • points demerit system (PDS) 	<p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Comprehension</p> <p>Knowledge</p>
2. Maintain food preparation and service utensils and equipment	<ul style="list-style-type: none"> • what germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis • what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol • how foodborne illnesses are transferred • meaning of contamination and cross-contamination • importance of using clean hot water and detergent for cleaning • dangers of using chipped, broken or cracked crockery • points demerit system (PDS) 	<p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p>
3. Prepare food safely	<ul style="list-style-type: none"> • what germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis • what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol • how foodborne illnesses are transferred • meaning of contamination and cross-contamination • how temperature affects growth of germs in food • importance of using potable water • importance of recognising plants, fish and foods with naturally occurring poisonous components, such as toadstools, some wild mushrooms and puffer fish • points demerit system (PDS) 	<p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p>
4. Handle food safely	<ul style="list-style-type: none"> • what germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, 	<p>Knowledge</p> <p>Knowledge</p>

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
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	<ul style="list-style-type: none"> • paratyphoid and campylobacteriosis • what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol • how foodborne illnesses are transferred • importance of preventing cross-contamination • importance of not using metallic fasteners to wrap food • why food transportation vehicles should not be used for other purposes • why certain foods are considered high-risk • considerations for handling high-risk foods • points demerit system (PDS) 	<p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Comprehension</p> <p>Comprehension</p> <p>Knowledge</p>
5. Store food safely	<ul style="list-style-type: none"> • what germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis • what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol • how foodborne illnesses are transferred • importance of holding and storing food at proper temperatures • importance of maintaining proper storage conditions • importance of ensuring that food products and items used in food preparation and service are stored apart from cleaning supplies, insecticides and other chemicals and away from potential sites of contamination, such as toilet rooms, locker areas and mechanical rooms • importance of stock rotation, such as first-in first-out (FIFO) system • points demerit system (PDS) 	<p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p>
6. Maintain food preparation, service and storage areas	<ul style="list-style-type: none"> • what germs are, such as bacteria, viruses, fungi/moulds and Protozoa • what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis • what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol • how foodborne illnesses are transferred • importance of preventing infestations of pests • signs of pest infestations • how foodborne illnesses are transferred • points demerit system (PDS) 	<p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p> <p>Comprehension</p> <p>Knowledge</p> <p>Application</p> <p>Comprehension</p> <p>Knowledge</p>

Cognitive Levels – describe the levels of knowledge required of the competency element, based on the following guidelines:

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)*

Level 1 – Knowledge: observe and recall information; know dates, events, places; know major ideas; have mastery of subject matter

Level 2 – Comprehension: understand information; grasp meaning; translate knowledge into new context; interpret facts; compare; contrast; order; group; infer causes; predict consequences

Level 3 – Application: use information; use methods, concepts, theories in new situations; solve problems using required skills or knowledge

Level 4 – Analysis: see patterns; see organisation of parts; recognise hidden meanings; identify components

Level 5 – Synthesis: use old ideas to create new ones; generalise from given facts; relate knowledge from several areas; predict; draw conclusions

Level 6 – Evaluation: compare and discriminate between ideas; assess value of theories, presentations; make choices based on reasoned argument; verify value of evidence; recognise subjectivity

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)

II Performance Requirements

Competency Unit Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element 1. Maintain Personal Hygiene

<p>Performance Criteria <i>A competent individual must be able to successfully perform the following:</i></p>	<p>Range and Context</p>
<p>1.1 Maintain personal hygiene, which may include:</p> <ul style="list-style-type: none"> • washing hands thoroughly with soap and warm water after visiting toilet and taking breaks • keeping fingernails short and clean, with no nail polish or artificial fingernails • wearing clean clothes and aprons • keeping hair neat and tied back or covered with cap • covering cuts or sores with waterproof plasters and wearing disposable, waterproof gloves <p>1.2 Work when in good health, which may include:</p> <ul style="list-style-type: none"> • keeping typhoid inoculation up to date, i.e., every 3 years • undergoing tuberculosis screening every three years at age 45 and above • not handling or preparing food if ill with fever or diarrhoea • seeing doctor immediately when ill <p>1.3 Refrain from unhygienic personal habits, which may include:</p> <ul style="list-style-type: none"> • smoking • spitting • picking nose • cleaning ears with fingers • combing or touching hair • sneezing or coughing over food • wiping perspiration with bare hands • wearing accessories or jewellery that may drop into or contaminate food during preparation • tasting food with fingers or used cutlery 	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • sinks, soap • hairnets, caps • aprons • waterproof plasters <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit points systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • hygiene at work site • dress code • inoculations and tuberculosis screening <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers • customers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • N/A

II Performance Requirements

Competency Unit Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element 2. Maintain Food Preparation and Service Utensils and Equipment

	Range and Context
<p>Performance Criteria <i>A competent individual must be able to successfully perform the following:</i></p> <p>2.1 Wash cooking utensils, crockery, storage containers, equipment, pots and pans with detergent and clean hot water. Washing may include:</p> <ul style="list-style-type: none"> • pre-scraping, rinsing and pre-soaking soiled equipment and utensils • mechanical warewashing requiring racking of soiled equipment and utensils for even cleaning and air drying <p>2.2 Wash cooking utensils, storage containers, appliances, pots and pans immediately after use, which may include:</p> <ul style="list-style-type: none"> • not leaving dirty cooking utensils, appliances, pots and pans and other equipment overnight • cleaning chopping boards and knives thoroughly between tasks <p>2.3 Store plates, utensils, pots and pans on clean raised shelves, racks and cupboards.</p> <p>2.4 Use crockery, utensils and appliances that are in good condition, which may include:</p> <ul style="list-style-type: none"> • disposing of crockery, utensils and appliances that are chipped, broken or cracked • not re-using disposable crockery, drinking straws, food wrappers and packages <p>2.5 Use separate towels for different tasks, which may include wiping:</p> <ul style="list-style-type: none"> • food preparation utensils and equipment • tables • hands <p>2.6 Launder towels regularly or according to organisational procedures.</p>	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • detergent/sanitiser • towels • dishwasher • shelves, racks, cupboards <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • cleaning/sanitising of equipment and towels • use of chopping boards and knives • disposal of damaged crockery, utensils and appliances <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • N/A

II Performance Requirements

Competency Unit Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element 2. Maintain Food Preparation and Service Utensils and Equipment

Performance Criteria <i>A competent individual must be able to successfully perform the following:</i>	Range and Context
<p>2.1 Wash cooking utensils, crockery, storage containers, equipment, pots and pans with detergent and clean hot water. Washing may include:</p> <ul style="list-style-type: none"> • pre-scrapping, rinsing and pre-soaking soiled equipment and utensils • mechanical warewashing requiring racking of soiled equipment and utensils for even cleaning and air drying <p>2.2 Wash cooking utensils, storage containers, appliances, pots and pans immediately after use, which may include:</p> <ul style="list-style-type: none"> • not leaving dirty cooking utensils, appliances, pots and pans and other equipment overnight • cleaning chopping boards and knives thoroughly between tasks <p>2.3 Store plates, utensils, pots and pans on clean raised shelves, racks and cupboards.</p> <p>2.4 Use crockery, utensils and appliances that are in good condition, which may include:</p> <ul style="list-style-type: none"> • disposing of crockery, utensils and appliances that are chipped, broken or cracked • not re-using disposable crockery, drinking straws, food wrappers and packages <p>2.5 Use separate towels for different tasks, which may include wiping:</p> <ul style="list-style-type: none"> • food preparation utensils and equipment • tables • hands <p>2.6 Launder towels regularly or according to organisational procedures.</p>	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • detergent/sanitiser • towels • dishwasher • shelves, racks, cupboards <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • cleaning/sanitising of equipment and towels • use of chopping boards and knives • disposal of damaged crockery, utensils and appliances <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • N/A

II Performance Requirements

Competency Unit	Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element	3. Prepare Food Safety

<p>Performance Criteria <i>A competent individual must be able to successfully perform the following:</i></p>	<p>Range and Context</p>
<p>3.1 Use good quality food ingredients, which may include ingredients that are:</p> <ul style="list-style-type: none"> • stored at proper temperatures • fresh or within shelf life/best-before dates • not spoilt, stale or contaminated <p>3.2 Use potable water for food preparation, e.g., use only food-grade ice.</p> <p>3.3 Defrost food safely, which may include:</p> <ul style="list-style-type: none"> • defrosting food in refrigerator/chiller and not at room temperature • defrosting food completely before use • catching drippings when handling defrosted food and its wrappers <p>3.4 Clean and wash food as required, which may include:</p> <ul style="list-style-type: none"> • soaking in water • rinsing • scrubbing and/or peeling <p>3.5 Prepare food on designated food-preparation work surfaces, which may include:</p> <ul style="list-style-type: none"> • not preparing food on floor, near toilet or by drain <p>3.6 Use separate chopping boards, knives and other utensils for working with cooked and raw foods, in order to prevent cross-contamination.</p> <p>3.7 Separate and label meat grinders used for processing mutton, pork and beef.</p> <p>3.8 Cook food thoroughly to required temperatures and for required times. Determining doneness may include:</p> <ul style="list-style-type: none"> • testing internal temperature of food with food thermometer • checking temperature of oven <p>3.9 Re-heat food thoroughly, which may include:</p> <ul style="list-style-type: none"> • re-heating food to 70°C for at least 2 minutes • not re-heating same food repeatedly over several days 	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • gloves • thermometers • kitchen utensils, e.g., chopping boards, knives, peelers, labels • appliances, e.g., refrigerators, chillers, ovens, ranges, slicers, blenders, meat grinders <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • MUJS – Halal food requirements • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • food cleaning • defrosting • labelling of meat grinder • cooking temperature • re-heating food • high-risk food preparation <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical

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<p>3.10 Ensure that high-risk food is handled appropriately. High-risk food may include:</p> <ul style="list-style-type: none">• shellfish and seafood, such as oysters, raw fish, prawns, shrimp, mussels, crab and lobster• poultry products, such as raw chicken and eggs• meat and meat-based products, such as gravies, stews, soups, stock and ground meat products• uncooked or lightly cooked foods, such as salads, dairy products and sandwiches with mayonnaise	<p>Any Exceptions:</p> <ul style="list-style-type: none">• N/A
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II Performance Requirements

Competency Unit Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element 4. Handle Food Safely

<p>Performance Criteria <i>A competent individual must be able to successfully perform the following:</i></p>	<p>Range and Context</p>
<p>4.1 Use waterproof disposable gloves to handle cooked/ready-to-eat food. Wearing gloves may include changing gloves:</p> <ul style="list-style-type: none"> • after different tasks, such as handling raw food and plating cooked food • when they are torn or soiled <p>4.2 Refrain from unsafe food handling practices, which may include:</p> <ul style="list-style-type: none"> • blowing into plastic bags or food wrappers to open them • using bare hands to handle cooked/ready-to-eat food • handling coins or money during food preparation • mixing, selling or re-selling any cooked/ready-to-eat food that has been stored or handled unsafely, such as food dropped on floor or stored unprotected from dust, germs and pests • combining containers of foods, such as adding old salad to fresh salad <p>4.3 Use utensils to handle cooked/ready-to-eat food. Using utensils may include:</p> <ul style="list-style-type: none"> • using tongs or scoop to place ice in glasses (and not using bare hands or glassware) • using trays to avoid contact with rims of glasses and bowls • providing customers with serving spoons for shared dishes <p>4.4 Ensure that high-risk food is handled appropriately. High-risk food may include:</p> <ul style="list-style-type: none"> • shellfish and seafood, such as oysters, raw fish, prawns, shrimp, mussels, crab and lobster • poultry products, such as cooked chicken and eggs • meat and meat-based products, such as gravies, stews, soups, stock and burgers • uncooked or lightly cooked foods, such as salads, dairy products and sandwiches with mayonnaise <p>4.5 Wrap food safely, which may include:</p> <ul style="list-style-type: none"> • using clean food grade packaging materials • using food containers with tight-fitting lids, especially when food will be transported • not using metallic fasteners (such as staples, clips or pins) to seal or wrap food • removing utensils from food before storing <p>4.6 Display food safely, which may include:</p> <ul style="list-style-type: none"> • maintaining showcases with sneeze guards • checking temperatures of display chillers to ensure that safe holding temperatures are being maintained 	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • gloves • kitchen utensils, e.g., tongs, scoops, ladles • food grade food wrappers, e.g., plastic, certain types of leaves, Styrofoam • fasteners, e.g., rubber bands, wooden sticks • food containers, e.g., card boxes, plastic carrier bags <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • handling of high-risk food • handling of ice <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers • customers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • N/A

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<p>4.7 Transport prepared food products safely, which may include:</p> <ul style="list-style-type: none">• ensuring that vehicle has proper shelves to place food containers on• ensuring that food containers have tight-fitting lids• keeping vehicle clean• using vehicle for transporting food only	
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II Performance Requirements

Competency Unit	Follow Food and Beverage Safety and Hygiene Policies and Procedures
Competency Element	5. Store Food Safely

Performance Criteria	Range and Context
<p>A competent individual must be able to successfully perform the following:</p> <p>5.1 Use appropriate containers for storage of raw food. Appropriate containers may include:</p> <ul style="list-style-type: none"> • clean food grade packaging materials • food containers with covers • no utensils stored with food <p>5.2 Hold prepared food safely, which may include using proper:</p> <ul style="list-style-type: none"> • warming or heating equipment to hold hot prepared foods at temperatures above 60°C • chilling/refrigeration equipment to hold cold prepared foods at temperatures not above 4°C <p>5.3 Store food at correct temperatures, which may include storing:</p> <ul style="list-style-type: none"> • frozen meat at temperatures not above –12°C • ice cream at temperatures not above –2°C • chilled fresh meat at temperatures of 0°C to 4°C • thawed frozen/defrosted meat at temperatures of 0°C to 4°C • dairy products at temperatures not above 7°C • fruits and vegetables at appropriate temperatures to maintain freshness <p>5.4 Refrigerate or chill food safely, which may include:</p> <ul style="list-style-type: none"> • maintaining proper temperature of refrigerator/chiller by not leaving door open and not overstocking • monitoring refrigerator/chiller temperature gauge • storing cooked food on shelves above raw food • not stacking food that is being chilled • segregating different types of raw meat <p>5.5 Freeze food safely, which may include:</p> <ul style="list-style-type: none"> • maintaining proper temperature of freezer by not leaving door open, not opening door frequently and not overstocking • monitoring freezer temperature gauge • not refreezing food • cutting large cuts of meat into smaller useable cuts before freezing <p>5.6 Store dry goods safely, which may include:</p> <ul style="list-style-type: none"> • using shelves that are 30 centimetres above floor 	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • thermometer • appliances, e.g., refrigerator, chiller, freezer, warmer, steam table • containers, labels, shelving • scoops • food wrappers, e.g., plastic wrap, freezer paper <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • storage <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • N/A

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<ul style="list-style-type: none">• not storing food products on window ledges• storing food and food preparation products away from overhead water and sewer lines• using scoops when accessing bulk food items• cleaning up spills immediately• ensuring that containers are tightly closed• storing cleaning supplies, insecticides and other chemicals in separate storage areas away from food products• not using toilet rooms, locker areas or mechanical rooms to store food products or items used for food preparation or service <p>5.7 Use first in, first out (FIFO) stock rotation system, which may include:</p> <ul style="list-style-type: none">• placing items on shelves so that oldest items are used first• labelling containers specifying contents, date and time	
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II Performance Requirements

Competency Unit Follow Food and Beverage Safety and Hygiene Policies and Procedures

Competency Element 6. Maintain Food Preparation, Service and Storage Areas

Performance Criteria <i>A competent individual must be able to successfully perform the following:</i>	Range and Context
<p>6.1 Keep floors clean and dry, which may include:</p> <ul style="list-style-type: none"> • cleaning and drying mats <p>6.2 Keep drains and gullies clean, which may include:</p> <ul style="list-style-type: none"> • covering gullies with grid • protecting drains to prevent entry of pests <p>6.3 Keep premises clean and orderly to avoid attracting pests, such as rodents and cockroaches. Activities may include:</p> <ul style="list-style-type: none"> • disposing of unwanted boxes, crates and other articles that may provide hiding places for pests • examining premises for crevices, such as loose fitting doors and openings in walls where pests can hide • keeping drains and gullies covered • not storing boxes or piles of newspapers on showcases • not leaving dirty/soiled crockery, utensils, storage containers or appliances around food preparation areas <p>6.4 Keep food storage areas clean, which may include:</p> <ul style="list-style-type: none"> • sweeping and washing floors in dry food storage areas • wiping off shelves, racks and cupboards • mopping walk-in refrigerator/chiller • wiping food display shelves • sanitising refrigerator/chiller shelves • vacuuming and wiping down shelves in food transportation vehicle <p>6.5 Control refuse, which may include:</p> <ul style="list-style-type: none"> • bagging refuse before disposal • using covered refuse bins lined with plastic bags • minimising contact with refuse by using bins with foot pedals • emptying refuse bins regularly and not letting them overflow with garbage 	<p>Tools and Equipment: <i>Use of tools and equipment, which may include:</i></p> <ul style="list-style-type: none"> • mops and brooms • detergents • garbage bins and bags • sanitiser <p>Regulations: <i>Observe rules and regulations, which may include:</i></p> <ul style="list-style-type: none"> • Environmental Public Health Act • Environmental Public Health (Food Hygiene) Regulations • National Environment Agency licensing requirements, including grading and demerit systems • Ministry of Manpower occupational safety and health <p>Procedures: <i>Apply procedures, which may include:</i></p> <ul style="list-style-type: none"> • cleaning • pest control <p>Interactions: <i>Work with people, which may include:</i></p> <ul style="list-style-type: none"> • supervisors • co-workers <p>Frequency:</p> <ul style="list-style-type: none"> • frequently <p>Criticality:</p> <ul style="list-style-type: none"> • very critical <p>Any Exceptions:</p> <ul style="list-style-type: none"> • Management may use private cleaning companies to clean and service premises and for pest control, which is applicable to performance criteria 6.2 and 6.3.

TRAINING GUIDE

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures

Learning Outcomes and Learning Activities

The following are the competency elements of this unit stated as learning outcomes. Once the trainer has determined the scope of the training programme, learning outcomes can be selected that will comprise the training content and determine a logical order of presentation. See Learning Activities in Annex A.

Learning Outcomes <i>On completion of this unit, a learner shall be able to:</i>	Learning Activities
1. Maintain personal hygiene	<ul style="list-style-type: none"> • PRESENTATION explaining what foodborne illnesses and their causes, how illness is transferred and importance of good personal hygiene habits • DEMONSTRATION on proper hand washing technique • PRACTICE of proper hand washing technique • DISCUSSION of unhygienic personal habits and how they contribute to spread of foodborne illnesses
2. Maintain food preparation and service utensils and equipment	<ul style="list-style-type: none"> • PRESENTATION on transfer of foodborne illness and importance of proper cleaning and sanitising techniques • DEMONSTRATION of washing techniques, both manual and automated
3. Prepare food safely	<ul style="list-style-type: none"> • PRESENTATION on importance of temperature and its effect on foodborne illnesses, risk of contamination and cross-contamination during food preparation and recognition of poisonous plants, fish and naturally occurring compounds • DISCUSSION on kitchen strategies that could be used to prevent contamination and cross-contamination
4. Handle food safely	<ul style="list-style-type: none"> • PRESENTATION on safe food handling strategies in different settings and how to minimise potential transfer of foodborne illnesses • PRACTICE different ways and means of handling foods in different scenarios • DISCUSSION on food handling strategies that could be used to prevent contamination and cross-contamination
5. Store food safely	<ul style="list-style-type: none"> • PRESENTATION on importance of holding and storage temperatures, storage requirements for various food types and requirements for food transportation vehicles • OBSERVATION AND FEEDBACK of actual storage area as field trip to review concepts • DISCUSSION of field trip to identify correct storage conditions observed and what could be done to correct inappropriate conditions
6. Maintain food preparation, service and storage areas	<ul style="list-style-type: none"> • PRESENTATION on pest infestations and signs of infestation, and identification of what and how food preparation, service and storage areas should be cleaned • OBSERVATION AND FEEDBACK of actual food preparation, service and storage area as field trip to review concepts • DISCUSSION of field trip to identify correct maintenance conditions observed and what could be done to correct inappropriate conditions

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ESS Rating

The Employability Skills System rating that follows provides the level of English literacy, verbal communication and numeracy required for an individual to achieve the competency elements in this unit. The ESS level descriptors for the attainment of the literacy components can be found in Annex B.

Competency Unit	Listening/Speaking	Reading/Writing	Numeracy
Follow food and beverage safety and hygiene policies and procedures	4	4	4

Recommended Delivery Hours

In order to receive recognition for completing this unit, it is recommended that approximately twelve (12) hours of training time be dedicated to delivering, practicing and evaluating the requisite knowledge, skills and attitudes.

Training Delivery Resources

The following can be used in conjunction with the competency elements of this unit:

- a. References:
 - National Environment Agency Publications
 - CTHRC Professional Cooking Standards (April 1999)
- b. Texts:
 - The Professional Chef by The Culinary Institute of America (7th edition, 2002)
 - On Cooking, A Textbook of Culinary Fundamentals by Sarah R. Labensky and Alan M. Hause (1995)
 - Cooking Essentials for The New Professional Chef by The Food and Beverage Institute (1997)
 - CTHRC Transferable Skills Occupational Standards Second Edition (August 2003)
 - CTHRC Tourism Essentials Trainer's Guide and Workbook (2003)
 - ATEC Service Best™ Staff Trainer's Guide and Participant's Manual (2002)
- b. Multimedia/Websites:
 - CTHRC video kit Establishing Rapport (1997)
 - CTHRC video kit Ethics and Special Needs (1997)
 - CTHRC video kit Team Approach (1997)

Training Facilities Requirements

The training session plan should identify the facility in which the training will occur. This should be a practical location with regards to the type of training taking place. For this unit, training could take place in a food and beverage production operation or simulated food and beverage production operation, including kitchen, service and storage areas in a training facility.

Trainer Requirements

A trainer of this competency unit must:

- have demonstrated competency under this competency unit
- have at least two (2) years of experience at a supervisory level, including evidence of maintaining currency, for example, through recent work in the industry as a supervisor, consultant or trainer, or professional development or active membership in a professional association
- be certified as competent in preparation, delivery and evaluation of training sessions or have relevant National Trainer Competency Standards certification

ASSESSMENT GUIDE

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures

Assessment activities must enable learners to provide evidence of skills, knowledge and understanding as set out under the competency standard of this competency unit.

Ways of assessing an individual under this competency unit may include role play, practical demonstration, customer feedback, short-answer questions (oral or written), work observation and supervisor reports. A combination of methods is often the best way to ensure a comprehensive and thorough assessment of an individual's competence.

Assessor Requirements

An assessor of this competency unit must:

- have demonstrated competency under this competency unit
- have at least two (2) years of experience at a supervisory level, including evidence of maintaining currency, for example, through recent work in the industry as a supervisor, consultant or trainer, or professional development or active membership in a professional association
- be certified as competent in the planning and conducting of competency-based assessments or have relevant National Trainer Competency Standards certification

Assessment Strategies

The assessor, through professional judgement, will collect sufficient evidence to make a sound appraisal of the learner's achievement of the critical aspects of competence. The tools that are used in evidence collection must be valid, reliable and fair. They must be regularly reviewed and modified for continuous improvement.

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Suggested Assessment Strategies and Evidence Sources

The following is a list of examples of kinds of evidence that would provide a guide as to where a learner is meeting the standards required to become competent in this competency element. The assessor could make use of one or all of the assessment strategies/evidence sources.

Competency Elements	Assessment Strategies and Evidence Sources		
	Process	Products/Outcomes	Others (Verbal and/or Written Paper)
1. Maintain personal hygiene	<p><u>Role Play/Practical Performance</u> Observations of maintaining personal hygiene, which may include:</p> <ul style="list-style-type: none"> washing hands after using toilet or taking breaks washing hands before touching food products or items used in food preparation or service not working when ill 	<p><u>Product</u></p> <ul style="list-style-type: none"> clean hands clean, short fingernails clean, neat uniform hair neatly tied back and/or covered with cap covered cuts and sores no instances of unhygienic personal habits 	<p><u>Oral Questions</u></p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis how foodborne illnesses are transferred impact of good personal hygiene on prevention of foodborne illnesses points demerit system (PDS)
2. Maintain food preparation and service utensils and equipment	<p><u>Role Play/Practical Performance</u> Observations of maintaining food preparation and service utensils and equipment, which may include:</p> <ul style="list-style-type: none"> operating dishwasher disposing of broken, chipped or cracked crockery using different towels for different tasks storing clean utensils and equipment in proper locations 	<p><u>Product</u></p> <ul style="list-style-type: none"> clean cooking utensils, storage containers, pots, pans, crockery and equipment to prepare and serve food no broken, chipped or cracked crockery in use clean equipment easily located and available for use clean towels available for use 	<p><u>Oral Questions</u></p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol how foodborne illnesses are transferred meaning of contamination and cross-contamination importance of using clean hot water and detergent for cleaning dangers of using chipped, broken or cracked crockery points demerit system (PDS)
3. Prepare food safely	<p><u>Role Play/Practical Performance</u> Observations of preparing food safely, which may include:</p> <ul style="list-style-type: none"> scrubbing and peeling raw vegetables soaking shellfish preparing food at designated workstations 	<p><u>Product</u></p> <ul style="list-style-type: none"> no incidents of foodborne illnesses labelled meat grinders no prepared food sitting at room temperature 	<p><u>Oral Questions</u></p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol

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	<ul style="list-style-type: none"> checking shelf life/best-before dates of food ingredients using designated chopping boards and knives for cutting raw meat 		<ul style="list-style-type: none"> how foodborne illnesses are transferred meaning of contamination and cross-contamination how temperature affects growth of germs in food importance of using potable water importance of recognising plants, fish and foods with naturally occurring poisonous components, such as toadstools, some wild mushrooms and puffer fish points demerit system (PDS)
<p>4. Handle food safely</p>	<p>Role Play/Practical Performance Observations of handling food safely, which may include:</p> <ul style="list-style-type: none"> garnishing plated food with gloved hands using trays to serve beverages holding glasses by sides, not rims ensuring that sandwiches with mayonnaise are kept chilled using tongs or scoop to put ice in beverage glasses stacking food containers on shelves in transportation vehicle 	<p>Product</p> <ul style="list-style-type: none"> no incidents of foodborne illnesses display cases with sneeze guards food grade packaging materials and fasteners food storage containers with tight-fitting lids clean transportation vehicle 	<p>Oral Questions</p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol how foodborne illnesses are transferred importance of preventing cross-contamination importance of not using metallic fasteners to wrap food why food transportation vehicles should not be used for other purposes why certain foods are considered high-risk considerations for handling high-risk foods points demerit system (PDS)
<p>5. Store food safely</p>	<p>Role Play/Practical Performance Observations of storing food safely, which may include:</p> <ul style="list-style-type: none"> checking temperatures of refrigerators, chillers and freezers minimising frequency and length of time that freezer and refrigerator doors are open keeping frozen meat in freezer keeping dairy products in refrigerator 	<p>Product</p> <ul style="list-style-type: none"> frozen food with very little ice crystal formation storage equipment at proper temperatures for storing or holding food different types of food in proper storage conditions no food or food preparation or service items stored in locker areas, toilet rooms or mechanical rooms 	<p>Oral Questions</p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol how foodborne illnesses are transferred importance of holding and storing food at proper temperatures importance of maintaining proper storage conditions importance of ensuring that food products and items used in food preparation and service are stored apart from cleaning supplies, insecticides and other chemicals and away from potential sites of contamination, such as toilet rooms, locker areas and mechanical rooms importance of stock rotation, such as first-in first-out (FIFO) system points demerit system (PDS)

Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)

<p>6. Maintain food preparation, service and storage areas</p>	<p><u>Role Play/Practical Performance</u> Observation of maintaining food preparation, service and storage areas, which may include:</p> <ul style="list-style-type: none"> removing empty boxes, crates and stacks of newspaper from food preparation and service areas using covered garbage bins with foot pedals lining garbage bins with plastic bags mopping/sweeping food storage areas, including walk-in chillers and refrigerators wiping display case shelves with clean hot water and sanitiser wiping tables and chairs with sanitising solution 	<p><u>Product</u></p> <ul style="list-style-type: none"> no signs of pests tidy covered garbage bins lined with plastic bags clean surfaces, including walls, floors and exhaust hoods clean shelves and display cases clean service area, including tables, chairs, floors, walls, menus and condiment containers 	<p><u>Oral Questions</u></p> <ul style="list-style-type: none"> what germs are, such as bacteria, viruses, fungi/moulds and Protozoa what foodborne illnesses are, such as typhoid, cholera, dysentery, hepatitis A, salmonellosis, paratyphoid and campylobacteriosis what food contaminants are, such as chemicals, heavy metals, insecticides and methyl alcohol how foodborne illnesses are transferred importance of preventing infestations of pests signs of pest infestations how foodborne illnesses are transferred points demerit system (PDS)
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*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)*

Workplace Safety and Health Requirements

This competency unit should be delivered and assessed in accordance with the generic Workplace Safety and Health Competency Standards. Learners should only be required to undertake instruction and assessments in environments that comply with the generic Workplace Safety and Health Competency Standards. For more information on generic Workplace Safety and Health Competency Standards, please access www.mom.gov.sg.

Integrated Delivery and Assessment

This competency unit may be delivered and assessed jointly with other closely related competency units where the work processes documented in the competency units occur together in the normal working environment.

Integration of delivery and assessment should allow the learner to apply skills and knowledge across the range and context required to demonstrate competence of all the selected competency units.

References	Associated Competency Units	Remarks
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	.	

Sample Knowledge Assessment Questions

List is not exhaustive.

1. How can typhoid, hepatitis A and salmonellosis be transferred?
2. Describe two personal hygiene practises that can prevent the transfer of foodborne illnesses.
3. As a food handler, what health screening is required every 3 years at 45 years of age and older?
4. List four unhygienic personal habits.
5. Describe how food preparation and service utensils and equipment can transfer foodborne illnesses.
6. Why must chipped or cracked crockery not be used for food service or preparation?
7. Describe how plates, utensils, pots and pans should be stored?
8. List three types of food contaminants.
9. What is the safest and most reliable way to test that a food is properly cooked?
10. What is the purpose of a best-before date?
11. Why is it necessary to use different cutting boards and knives when preparing cooked and raw foods?
12. Describe how to defrost poultry safely.
13. What temperature should food that is being re-heated reach and how long should it be at that temperature before serving?
14. List three foods that are considered high risk.
15. Describe how to safely put ice into glasses for cold beverage service.
16. When should disposable gloves worn for food preparation be changed?
17. Why is it unsafe to use staples, pins or clips to seal or wrap food?
18. How should food that is going to be transported be packaged?
19. What utensils should be used to handle cooked/ready-to-eat foods?
20. Why are foods containing mayonnaise considered high risk?
21. At what temperature should warm prepared foods be held?
22. At what temperature should cold prepared foods be held?
23. What is the appropriate temperature at which to store frozen meat?
24. Describe two practises that help to maintain proper chiller/refrigerator temperatures.
25. How should raw and cooked foods be arranged on chiller/refrigerator shelves?
26. What does FIFO stand for?
27. Describe three conditions that could attract pests.

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
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28. Describe how dry food storage areas should be kept clean.
29. Why is it important to keep drains and gullies clean and covered?
30. Describe three strategies that help to control refuse.

*Competency Unit: Follow Food and Beverage Safety and Hygiene Policies and Procedures
(FB-RM-102C-0)*

Sample Performance Assessment Checklist

Instructions:

- Record the candidate’s name, the date and the supervisor’s name.
- Observe the candidate performing each competency element for this unit.
- Evaluate the candidate’s performance as C (competent) or NYC (not yet competent) by ticking the appropriate column.
- Provide detailed comments to justify your evaluation.

1. Maintain Personal Hygiene			
<i>Candidate:</i>			
<i>Date:</i>			
<i>Supervisor:</i>			
	C	NYC	Comments
1.1 Maintain personal hygiene.			
1.2 Work when in good health.			
1.3 Refrain from unhygienic personal habits.			

Learning Activities

The following is a list of examples describing some common learning activities and how they are best incorporated into training. There are other methods that may be effective at supporting training as well.

Learning Activities	Applications
Presentation	<ul style="list-style-type: none"> lecture-style method of instruction to introduce new logic, explain a process or give details on a specific subject generally used for presenting knowledge trainer-centred; little or no interaction with learners
Discussion	<ul style="list-style-type: none"> two-way interaction to examine issues or problems best for a small group of learners generally used for analysing problems, attitudes or difficult situations can be time consuming
Demonstration	<ul style="list-style-type: none"> learners are shown how to do a task generally used for skill development engages learners best conducted in small groups or one-on-one often linked with practice performance checklist is a useful tool
Practice	<ul style="list-style-type: none"> opportunity for learners to try performing a skill with support and feedback best conducted in small groups or one-on-one generally used for skill development effective form of learner engagement
Observation and Feedback	<ul style="list-style-type: none"> learners observe others in a real workplace environment to study and learn how a skill is performed or how knowledge or attitudes are displayed after observation, a discussion should be conducted to analyse the application of skills, knowledge or attitudes competency checklist is a useful tool to guide observation may be restricted by time and opportunity
Role Play	<ul style="list-style-type: none"> opportunity for learners to experiment with a new skill or to increase their awareness of their actions in certain interactions while a simulated environment is less intimidating, it may not accurately reflect a real work environment can be time consuming, depending on the length of the role play and the number of learners
Written Exercise	<ul style="list-style-type: none"> learners complete pre-made exercises, such as fill-in-the-blank, true or false, or short-answer useful to reinforce knowledge, begin a discussion or conduct pre- or post-assessment activities
Case Study	<ul style="list-style-type: none"> opportunity for learners to apply newly learned knowledge to a specific situation
Workplace Delivery/Practices	<ul style="list-style-type: none"> on-the-job training
Programme Text or Computer-aided Instructions (CAI)	<ul style="list-style-type: none"> for learning at a distance

Singapore Employability Skills System Level Descriptors

Level	Listening/Speaking	Reading/Writing	Numeracy	Employability
L8 Proficient	Can participate effectively in social and familiar work situations; can understand and participate in practical and social conversations and in technical discussions in own field.	Can handle most reading and writing tasks related to life roles; can read and interpret most non-simplified materials; can interpret routine charts, graphs and labels; fill out medical information forms and job applications.	-	Can meet work demands with confidence, interact with the public, and follows written instructions in work manuals.
L7 High Advanced	Can function independently in survival and social and work situations; can clarify general meaning and communicate on the telephone on familiar topics.	Can read and interpret non-simplified materials on everyday subjects; can interpret routine charts, graphs and labels; fill out medical information forms and job applications; and write an accident or incident report.	Can use maths in business, such as calculating discounts; can create and use tables and graphs.	Understands routine work-related conversations. Can handle work that involves following oral and simple written instructions and interact with the public. Can perform reading and writing tasks, such as most logs, reports, forms, with reasonable accuracy to meet work needs.
L6 Advanced	Can satisfy most survival needs and social demands. Has some ability to understand and communicate on the telephone on familiar topics. Can participate in conversations on a variety of topics.	Can read and interpret simplified and some non-simplified materials on familiar topics. Can interpret simple charts, graphs, and labels; interpret a payroll stub; and complete a simple order form; fill out medical information forms and job applications. Can write short personal notes and letters and make simple log entries.	Can interpret routine charts and graphs; interpret a payroll stub; complete an order form and do calculations; compute tips; reconcile a bank statement.	Can handle jobs and jobs training situations that involve following oral and simple written instructions and multi-step diagrams and limited public contact. Can read a simple employee handbook.
L5 High Intermediate	Can satisfy basic survival needs and limited social demands; can follow oral directions in familiar contexts. Has limited ability to understand on the telephone. Understands learned phrases easily and new phrases containing familiar vocabulary	Can read and interpret simplified and some authentic material on familiar subjects. Can write messages or notes related to basic needs. Can fill out basic medical forms and job applications.	Can interpret simple charts and graphs; interpret a basic payroll stub; complete a simple order form and do calculations.	Can handle job and/or training that involve following basic oral and written instructions and diagrams if they can be clarified orally.
L4 Low Intermediate	Can satisfy basic survival needs and very routine social demands. Understands simple learned phrases easily and some new simple phrases containing familiar vocabulary, spoken slowly with frequent repetition.	Can read and interpret simple material on familiar topics. Able to read and interpret simple directions, schedules, signs, maps and menus. Can fill out forms requiring basic personal information and write short, simple notes and messages based on familiar situations.	Can calculate a single simple operation when numbers are given, and make simple change.	Can handle entry-level jobs that involve some simple oral and written communication but in which tasks can also be demonstrated and/or clarified orally.
L3 High Beginning	Functions with some difficulty in situations related to immediate needs; may have some simple oral communications abilities using basic learned phrases and sentences.	Reads and writes letters and numbers and a limited number of basic sight words and simple phrases related to immediate needs. Can write basic personal information on simplified forms.	-	Can handle routine entry-level jobs that involve only the most basic oral or written communication in English and in which all tasks can be demonstrated.
L2 Beginning	Functions in a very limited way in situations related to immediate needs; asks and responds to basic learned phrases spoken slowly and repeated often.	Recognises and writes letters and numbers and reads and understand common sight words. Can write own name and address.	-	Can handle only routine entry-level jobs that do not require oral or written communication in English and in which all tasks are easily demonstrated.
L1 Pre-Beginning	Functions minimally, if at all, in English. Communicates only through gestures and a few isolated words.	May not be literate in English.	-	Can handle very routine entry-level jobs that do not require oral or written communication in English and in which all tasks are easily demonstrated. Employment choices would be extremely limited.

APPENDIX D
Example Of Wafer Fab WSQ Competency
Standard

Unit Code & Title	SC- EQT- 406E - 1 Manage Advanced Etching Tool Maintenance
Credit Value: 13	Training Delivery (Project) Hours = 120 hours Assessment Hours = 8 hours
Overview	
This training unit provides knowledge and skills in Managing Advanced Etching Tool Maintenance that are widely used in the wafer fabrication industry. This unit provides learners the opportunity to improve tool performance through project.	
Relevant Occupations	
The occupations that this unit would be relevant to include but not limited to:	
<ul style="list-style-type: none"> • All equipment personnel in Etching department • All PMETs relevant to this course 	
Performance Statements	
A competent individual must be able to successfully perform this unit covering the following performance statements:	
<ul style="list-style-type: none"> • Analyse tool performance metrics in accordance with specifications • Select appropriate project that will improve tool performance in accordance with organisation's needs • Define project scope of work and the number of hours based on business requirements • Execute project in accordance with project plan • Evaluate project effectiveness in accordance with project objectives • Recommend follow up actions in accordance with organisation's needs 	
Underpinning Knowledge	
A competent individual is required to have the following knowledge:	
<ul style="list-style-type: none"> • Problem solving techniques • Types of tool performance metrics 	

Range of Application

The range of application of this unit may include but not limited to the following:

Tool performance improvement project may include but not limited to:

- Cost reduction
- Parts evaluation
- Tool efficiency
- Tool matching

Duration of the project should not be less than 60 hrs.

Tools & Equipments

Use of Tools and Equipment, which may include but not limited to:

- Etching tools
- Stripping / Ashing tools
- Oven / Baking tools
- Metrology tools
- Personal Protective Equipment (PPE)
- Troubleshooting tools such as particle counters, real-time monitor devices, temperature probe, etc
- Statistical Process Control (SPC)

Software

Use of appropriate software which may include but not limited to:

- Microsoft Office

Regulations

Observe rules and regulations which may include but not limited to:

- Workplace Safety & Health Act
- Regulations under Environmental Health & Safety (EHS)

Procedure and Supporting Documents

Apply procedures and supporting documents, which may include but not limited to:

- ISO/TS 16949
- ISO 9001: 2000

WSQ CERTIFIED WAFER FABRICATION ENGINEER OCCUPATIONAL STANDARDS



- SEMI standards
- Standard Operating Procedures for tools
- Tool's technical manuals
- Tool's performance metrics
- Usage of Personal Protective Equipment (PPE)

Interactions

Working with people which may include but not limited to;

- Engineering and manufacturing staffs
- Facilities officers
- External contractors and suppliers
- Supervisors
- Managers
- Subordinates

Evidence Guide

In order to be certified competent in this unit, the following serves as a guide for training providers and assessors in a performance-based assessment. The evidence sources are proposed at the unit level to allow the assessment designer or assessor to propose the relevant assessment strategies and tools in their assessment plan.

Listed below are some examples of evidence sources (products, processes, knowledge) and how they can be assessed to determine if the learner has met the performance standards and the underpinning knowledge in the standard.

Proposed Evidence Source(s)

The evidence of competency for this unit will be gathered through the following assessment strategy deemed necessary to fulfill all the performance statements and underpinning knowledge:

Product Evidence :

Product evidence will be based on the following means, which may include but not limited to the following:

- Project report submitted with supervisor's written or electronic endorsement

GLOSSARY

Approved Training Organisation (ATO)	ATOs are training organisations accredited under the WSQ to offer training programmes and assessment services leading to WSQ certification.
Assessment	A systematic process of collecting evidence and making judgements as to whether an individual has achieved a certain level of competency.
Assessment criteria and marking scheme	Provides the context and conditions, under which the assessment will be conducted, what evidence the assessor must collect and the grading criteria to be used.
Assessment method	The process or technique used to gather evidence. (Bresciani & Fackler, 2005)
Assessment plan	A document which outlines when the evaluation will take place and how it will be conducted. An assessment plan includes the “program mission or course/ activity purpose, goals as appropriate, intended outcomes, methods for gathering, analyzing data, and interpreting data for providing evidence to inform decision making.” (Bresciani & Fackler, 2005)
Assessment process	The series of steps which a candidate undertakes within the enrolment, assessment, recording and reporting cycle of assessment.
Assessment tool and knowledge	An instrument or resource used in association with a given assessment method. It may include a questionnaire, test paper, interview questions, structured report template and record sheet.
Assumed skills	Assumed skills and knowledge are skills and knowledge that learners ought to have and are assumed to have before they attend the training programme.
Competency	A competency is a measurable set of knowledge, skills and attitudes that drives an individual’s performance to perform at his / her job effectively.
Competency category	A competency category refers broad occupational or industry area or function. Competency units that are inter-related are grouped by competency categories.
Competency elements	A competency element is the sub-division of a competency unit. Competency elements encompass performance criteria, underpinning knowledge, range and context as well as the evidence sources.
Competency level	The competency level reflects the level of complexity and depth of learning required by the competencies in the standard. It is outlined in the competency standards.
Competency Map (CM)	A document that captures the type of competencies needed in an industry. The competencies are expressed as competency units and these are grouped into competency categories and pegged to occupational levels.
Competency	A competency standard documents expected work performance outcomes, expected level of performance, knowledge that supports the delivery of work performance outcomes and work contexts under which the work performance outcomes are to be delivered.

GLOSSARY

Competency Unit (CU)	A competency unit describes a particular work role, duty or function, which forms the smallest group of skills, knowledge and abilities set able to be recognized separately for certification. The certification requirements of a competency unit are detailed in a competency standard.
Continuing Education and Training (CET)	Continuing Education and Training (CET) refers to educational programmes for adults, usually at the post-secondary level and offered as part-time or short courses in occupational subject areas. Also see Pre-employment Training (PET).
Credit	A unit of measure assigned to courses or course of equivalent learning.
Curriculum, Training and Assessment Guide (CTAG)	The CTAG is a document that provides training and assessment advice to achieve effective training and assessment leading to WSQ certification of a competency unit.
Dimensions of competency	The dimensions of competency cover all aspects of work performance. The five dimensions of competency are: <ul style="list-style-type: none">- Task skills- Task management skills- Contingency management skills- Job and role management skills.- Transfer skills
Evidence sources	The evidence source section in a competency standard gives examples of tasks, observations, documents etc that can be used as evidence for assessing the particular competency element or list of performance statements.
Learning outcomes	The work performance that a learner should be able to demonstrate as a result of having undertaken training and/or assessment. It must be measurable, clear and observable.
Performance criteria / statements	Performance criteria or performance statements refer to the expected work performance outcomes or behaviours and expected level of performance to be demonstrated by a competent individual.
Pre-employment Training (PET)	Pre-employment Training (PET) refers to educational programmes that prepare individuals for entry into the workforce. This includes secondary, pre-university, polytechnic and university education.
Qualifications	Qualifications are formal certifications issued by a relevant approved body, in recognition that an individual has achieved learning outcomes identified by the industry.
Range and context	Range and context provides the type of situations under which the performance criteria / statements apply. Range and context cover items that are achievable or to be performed across by competent individuals, such as types of equipment, products and services, types of customers.
Underpinning knowledge	Underpinning knowledge states the knowledge that an individual needs to know and understand in order for him/her to perform competently at work.

Sources: Institute for Adult Learning (IAL), Sigma Solutions HRD Consultants Pte Ltd, Singapore Workforce Development Agency (WDA).