

CURRICULUM, TRAINING AND ASSESSMENT GUIDE

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Purpose of Guide

This Guide is designed for accredited Training Providers and Adult Educators who are responsible for the design and delivery WSQ Perform Design for Safety Professional Duties under the Generic Manufacturing Skills (GMS) WSQ Framework. This Guide aims to provide essential curriculum, training and assessment design advisory information, to guide developers, trainers and assessment in the interpretation and translation of competency standards into training and assessment programme. The Guide also contains training and assessment requirements stipulated by industry, and WSQ accreditation information for compliance. It is divided into 2 parts:

Part I - Details specific recommendations and advice for programme developers of “Perform Design for Safety Professional Duties”.

Part II - Provides a broad spectrum of information about WSQ and related components relevant to the “Perform Design for Safety Professional Duties” programme.

PART I

WSQ

Perform Design for Safety Professional Duties

CHAPTER 1: WSQ PERFORM DESIGN FOR SAFETY PROFESSIONAL DUTIES

1.1 Overview

On completion of this unit, learners will have knowledge and skills for fulfilling the roles of the construction Design for Safety Professional (DfS Professional) in accordance with the WSH (DfS) Regulations.

1.2 Key Features of WSQ Perform Design for Safety Professional Duties

The Performance Statements (PS) covered are:

- PS1. Recognise the importance of design for safety and health of a construction project to eliminate or mitigate such risks throughout the different life cycle of a building and structure
- PS2. Recognise, and advise stakeholders on, the duties and responsibilities of DfS Professionals in accordance with relevant legal requirements and WSH (DfS) Regulations
- PS3. Prepare for DfS review meetings in accordance with WSH (DfS) regulations
- PS4. Coordinate DfS review meetings for consideration of safety and health risks at different phases in the lifecycle of a building and structure
- PS5. Apply hazard identification tools and risk assessment for DfS review meetings in accordance with organisational procedures
- PS6. Establish types of safety and health records to be kept in the DfS Register in accordance with WSH(DfS) regulations
- PS7. Implement a system for documentation of safety and health records in accordance with organisational requirements
- PS8. Review safety and health records throughout the construction project in accordance with organisation requirements.
- PS9. Monitor safety and health issues throughout the construction project in accordance with organisation requirements
- PS10. Establish types of safety and health information to be communicated to stakeholders throughout the construction project
- PS11. Establish means of communication to relevant stakeholders for safety and health information in accordance with organisation requirements
- PS12. Coordinate the flow of relevant information to stakeholders throughout the construction project

Why this Course?

The “Perform Design for Safety Professional Duties” course aims to provide learners with the knowledge and skills for fulfilling the roles of the construction Design for Safety Professional (DfS Professional) in accordance with the WSH (DfS) Regulations.

1.4 Target Audience

1.4.1 The “Perform Design for Safety Professional Duties” is a mandatory WSH training course for all workers who would like to undertake the role of a Design for Safety professional.

1.4.2 Learners are assumed to possess the following skills and knowledge:

- Building design and construction operations
- Building and construction processes
- Legal and statutory requirements associated with building and construction
- Basic safety and health issues associated with construction operations
- Written and oral communication, presentation, facilitation and problem-solving skills

1.4.3 Learners are required to possess the following work experience and qualifications:

- Be a registered Professional Engineer (PE) or architect with a practicing certificate; OR
- Have 10 years of relevant experience in the design (at least 5 years in design which includes contributions to designs, writing specifications) and supervision of the construction of structures; and
- Have a degree accepted by PE Board (PEB) or Board of Architects (BOA), or a construction-related degree accepted by Singapore Institute of Surveyors and Valuers (SISV) or Society of Project Managers (SPM).

1.5 Recommended Learning Hours (RLH)

- RLH = 14 Hours (Training Hours: 12, Assessment Hours 2)
- The RLH takes into account the time required for direct learning activities. Direct learning is broadly defined as trainer/assessor-directed & involves purposeful instructions given to trainees to complete as part of instructional design of a structured facilitated training and assessment programme.

Activity	Duration	Remarks
Facilitated Learning (Theory)	12 hours	Theory: 12 hours
Assessment	2 hours	Written: 2 hours Individual Project: To be completed outside course schedule and submitted within 4 weeks upon completion of classroom training

- Facilitated training and assessment
- E-learning¹ and assessment

1.6 Recommended Class Size, and Learner-Trainer Ratio

- Recommended Class Size: 20
- Trainer Learner ratio: 1: 20 (classroom) 1:20 (Practical)
- Attendance Requirements: 75% for classroom and practical sessions

1.7 Recommended Assessor to Candidate Ratio

- Written Assessment: 1 : 20 (Class size)
- Practical Performance: 1 : 20 (exceeds 12 Learners, Assessor: Learner ratio is 2:12)

¹ For E-learning to be considered as “directed learning”, the learning progress of trainees should be tracked via audit trail, progress reports, etc.

CHAPTER 2: TYPES OF PROGRAMME

2.1 Programme Structure

2.1.1 This unit covers the following underpinning knowledge item which could be taught in the classroom via a combination of lectures, discussions and case-studies.

- UK1. Importance of design for safety and health for construction projects
- UK2. Phases in the lifecycle of a building and structure
- UK3. Duties and responsibilities of DfS professionals
- UK4. Stakeholders' duties and responsibilities in a construction project
- UK5. Steps and considerations during the preparation for DfS review meetings
- UK6. GUIDE process and its implementation in DfS review meetings
- UK7. Phases of DfS review meetings
- UK8. Safety and health risks considerations during DfS review meetings
- UK9. Hazard identification tools
- UK10. Risk assessment procedures
- UK11. Types of safety and health records relevant to DfS review meetings
- UK12. DfS Register (DfSR)
- UK13. Organisational documentation systems
- UK14. Safety and health records review procedures
- UK15. Types of safety and health issues
- UK16. Types of safety and health information for communication
- UK17. Means of communication to relevant stakeholders
- UK18. Considerations in coordinating flow of safety and health information

2.1.2 The unit also covers the following Performance Statements: These would best be taught via a combination of **lecture, demonstrations and hands-on practice**.

- PS1. Recognise the importance of design for safety and health of a construction project to eliminate or mitigate such risks throughout the different life cycle of a building and structure
- PS2. Recognise, and advise stakeholders on, the duties and responsibilities of DfS Professionals in accordance with relevant legal requirements and WSH (DfS) Regulations
- PS3. Prepare for DfS review meetings in accordance with WSH (DfS) regulations
- PS4. Coordinate DfS review meetings for consideration of safety and health risks at different phases in the lifecycle of a building and structure
- PS5. Apply hazard identification tools and risk assessment for DfS review meetings in accordance with organisational procedures
- PS6. Establish types of safety and health records to be kept in the DfS Register in accordance with WSH(DfS) regulations
- PS7. Implement a system for documentation of safety and health records in accordance with organisational requirements

- PS8. Review safety and health records throughout the construction project in accordance with organisation requirements.
- PS9. Monitor safety and health issues throughout the construction project in accordance with organisation requirements
- PS10. Establish types of safety and health information to be communicated to stakeholders throughout the construction project
- PS11. Establish means of communication to relevant stakeholders for safety and health information in accordance with organisation requirements
- PS12. Coordinate the flow of relevant information to stakeholders throughout the construction project

CHAPTER 3: KEY DELIVERY ADVICE

3.1 Content Coverage

In developing the programme for any “Perform Design for Safety Professional Duties” competency unit, TPs should always make cross references to the Performance Statements (PS), Underpinning Knowledge (UK), Range and Application and Evidence Sources sections as stipulated in the “Perform Design for Safety Professional Duties” National Competency Standard.

The components of the Competency Standard and the interpretations are briefly explained here.

For example,

The Range and Application and Evidence Sources reference to the Performance statements and/or Underpinning Knowledge is usually accompanied by the instructions “may include” or “must include”:

“May include”

- *Indicates that training providers are required to cover some (to indicate percentage if relevant) of the suggested Range and Application items listed when developing the “Perform Design for Safety Professional Duties” programme.*
- *The training provider may choose to add more Range and Application items related to the corresponding Performance Statements and/or Underpinning Knowledge as part of their “Perform Design for Safety Professional Duties” programme development.*

“Must include”

- *Indicates that training providers are required to cover all of Range and Application items listed when developing courseware.*
- *The training provider may choose to add more Range and Application items related to the corresponding Performance Statements and/or Underpinning Knowledge as part of their “Perform Design for Safety Professional Duties” programme development.*

3.2 Sequence of Coverage

The following sequence is recommended:

Lesson No.	Content	Instructional Mode	Duration (Hours)
1	<p>PS1 Recognise the importance of design for safety and health of a construction project to eliminate or mitigate such risks throughout the different life cycle of a building and structure.</p> <ul style="list-style-type: none"> State the importance of design for safety and health of a construction project in different phases of the building Describe the key requirements of the WSH (Risk Management) Regulations 	Theory	2.5h (2hr 30mins)
	<p>UK1 Importance of design for safety and health for construction projects</p> <ul style="list-style-type: none"> Improve planning and management of project at early stage of project Identify risk at design stage so that they can be effectively eliminated or mitigated Reduce overall costs of construction, repair and maintenance of a building and structure Prevent injury and ill health to persons Minimise unnecessary delays Improve quality of finished product Complying with legal requirements, which include and not limited to: <ul style="list-style-type: none"> WSH Act WSH (DfS) Regulations WSH (Risk Management) Regulations WSH (Construction) Regulations <p>UK2 Phases in the life cycle of a building and structure</p> <ul style="list-style-type: none"> Design Construction Maintenance/repair Demolition 		
2	<p>PS2 Recognise, and advise stakeholders on, the duties and responsibilities of DfS Professionals in accordance with relevant legal requirements and WSH (DfS) Regulations</p> <ul style="list-style-type: none"> Describe how the duties and responsibilities of DfS Professional are to be fulfilled in a case scenario Describe how a DfS Professional would advise relevant stakeholders concerning their duties and responsibilities in design for safety and health in a case scenario 	Theory	1/3h (20mins)
	<p>UK3 Duties and responsibilities of DfS Professionals</p> <ul style="list-style-type: none"> State the duties and responsibilities of DfS Professionals which include: Facilitate DfS Review Meetings Maintain safety and health records Coordinate flow of safety and health information 		
	<p>UK4 Stakeholders' duties and responsibilities in a construction project</p>		

	<ul style="list-style-type: none"> Identify the stakeholders in a DfS Review Meetings Identify the duties and responsibilities of clients, designers and contractors of a construction project Stakeholders, which include: <ul style="list-style-type: none"> Developers Designers Main Contractors Subsequent Building Owners DfS Professionals Stakeholders' duties and responsibilities include those as defined in the WSH (DfS) Regulations. 		
4	<p>PS3 Prepare for DfS review meetings in accordance with WSH (DfS) Regulations.</p> <ul style="list-style-type: none"> Explain the necessary actions required in the preparation of a DfS review meeting <p>UK5 Steps and considerations during the preparation for DfS review meetings</p> <ul style="list-style-type: none"> Establish safety and health review committee, which may include: <ul style="list-style-type: none"> Developer; Design engineer; Architect; DfS professional contractor Collate relevant information, which may include: <ul style="list-style-type: none"> Drawings Specifications Topographical surveys Soil investigation reports Site risk assessment records Pre-construction survey of adjacent buildings and works Define scope for DfS review meetings Define roles and responsibilities of persons involved in the DfS review meetings Determine hazard identification tools and risk assessment methods to be used Establish checklists and matrixes to be used for hazard identification and risk assessment Arrange necessary training of persons involved in the DfS review meetings Determine the method of documentation of the DfS review meetings Schedule DfS review meetings sessions Make logistic arrangements for the review <p>UK6 GUIDE process and its implementation in DfS review meetings</p> <ul style="list-style-type: none"> Define "GUIDE" Process of DfS review meetings include: <ul style="list-style-type: none"> G – Group together a review team consisting of major stakeholders U – Understand the full design concept 	Theory	1h (60mins)

	<ul style="list-style-type: none"> ○ I – Identify the risks that arise as a result of the design or construction method ○ D – Design around the risks identified to eliminate or to mitigate the risks ○ E – Enter all the vital information on safety and health risks and mitigating measures into the DfS Register <p>UK7 Phases of DfS Review Meetings</p> <ul style="list-style-type: none"> • List the 3 phases of in a construction project for which GUIDE process should be implemented <ul style="list-style-type: none"> ○ GUIDE 1: Concept design review ○ GUIDE 2: Detailed design, maintenance and repair review ○ GUIDE 3: Pre-construction review 		
5	<p>PS4 Coordinate DfS review meetings for consideration of safety and health risks at different phases in the life cycle of a building and structure</p> <ul style="list-style-type: none"> • Describe the tasks involved to effectively coordinate a DfS review meeting • Coordinate DfS review meetings may include but not limited to: <ul style="list-style-type: none"> ○ Guide safety and health review committee to keep discussion focused and on track ○ Encourage stakeholders involvement and cooperation in the review ○ Assist in identifying risks and highlighting the hazards concerned ○ Assist in identifying control measures for risk that cannot be eliminated ○ Promote the design suitability and compatibility <p>UK9 Safety and health risks considerations during DfS review meetings</p> <ul style="list-style-type: none"> • Site planning and preparation, which may include: <ul style="list-style-type: none"> ○ Soil condition ○ Site topography ○ Underground water ○ Underground services ○ Condition and proximity of adjacent buildings ○ Vehicular traffic movement ○ Pedestrians movement ○ Transport and storage of materials ○ Site clearance and demolition ○ Access and egress of persons ○ Excavation and tunnelling ○ Trenches • Civil and structural works <ul style="list-style-type: none"> ○ Road works, pipe and cable installation, road reinstatement and maintenance ○ Soil investigation, stabilisation and earthwork services ○ Piling ○ Concreting ○ Concrete repair and surface works 	Theory	1/3h (20mins)

	<ul style="list-style-type: none"> ○ Metal scaffolding ○ Metal formwork and supporting systems ○ Steel reinforcement ○ Structural steel works ○ Timber formwork and support systems ○ Precast erectors ○ Prefabrication • Architectural and finishing works <ul style="list-style-type: none"> ○ Wall and partition ○ Ceiling ○ Curtain wall/cladding ○ Drain laying/pavement and kerb construction ○ Windows and doors ○ Joinery ○ Metal work ○ Painting and road marking ○ Plastering ○ Roofing ○ Flooring ○ Waterproofing ○ Horticulture and landscape ○ Additions, alterations, repair and interior decoration • Mechanical and electrical works <ul style="list-style-type: none"> ○ Air conditioning, refrigeration and ventilation works ○ Electrical engineering works ○ Fire protection works ○ Plumbing, sanitary, gas piping and sewerage works ○ Lift escalator installation ○ Building automation, industrial and process control system • Equipment and special services <ul style="list-style-type: none"> ○ Construction plant and equipment services ○ Corrosion protection services ○ Cleaning and housekeeping services ○ Desalting services ○ Waste removal and recycling services ○ Pest control services • General consideration <ul style="list-style-type: none"> ○ Heaving lifting ○ Temporary works and sequencing ○ Layout ○ Confined spaces ○ Emergency route ○ Weather ○ Impact to the public • WSH hazards during construction, maintenance, repair phases of building may include: <ul style="list-style-type: none"> ○ Falling from height ○ Struck by falling objects ○ Caught in between objects ○ Exposed / contact with electricity ○ Exposed / contact with Harmful Substances/Radiations ○ Step on object ○ Noise Induced deafness 		
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	<ul style="list-style-type: none"> ○ Dermatitis ○ Solvent exposure ○ Manual handling ○ Muscular skeletal disorder ○ Hand/arm vibration syndrome 		
6	<p>PS5 Apply hazard identification tools and risk assessment for DfS Review Meetings in accordance with organisational procedures</p> <ul style="list-style-type: none"> • Complete a project report based on a given case on DfS review meeting. The report should include: <ul style="list-style-type: none"> ○ A brief description of hazard identification method used ○ Hazards identified and consideration made ○ Suggestions on design changes and other measures to mitigate risks ○ DfS register arising from the design review <p>UK9 Hazard identification tools</p> <ul style="list-style-type: none"> • Types of hazard identification tools which may include and not limited to: <ul style="list-style-type: none"> ○ GUIDE1 checklist ○ GUIDE2 checklist ○ GUIDE3 checklist • GUIDE checklists may include: <ul style="list-style-type: none"> ○ Hazards considerations in design ○ Guide words/prompts ○ Detail/hazards identified • What-If analysis <ul style="list-style-type: none"> ○ Steps in conducting the analysis involves: <ul style="list-style-type: none"> ○ Develop What-If questions ○ Determine the answers ○ Evaluate the risk ○ Recommend control measures ○ Record the results of analysis <p>UK10 Risk assessment procedures</p> <ul style="list-style-type: none"> • Describe the 3 steps involved in risk assessment • Process of risk assessment, which include: <ul style="list-style-type: none"> ○ Identify and analyse safety and health hazards ○ Evaluate the risks by considering factors, which include: <ul style="list-style-type: none"> ▪ Existing risk control measures ▪ Likelihood of occurrence ▪ Severity ▪ Risk level based on likelihood and severity • Control risks by mitigating measure, which may include and not limited to: <ul style="list-style-type: none"> ○ Design modification ○ Change in sequence of construction work ○ Change in construction material ○ Change in construction location ○ Change in positioning of equipment ○ Prefabricate of structures ○ Introduce safety features 	Theory	1.75h (1h 45mins) includes Learning Activity 1

	<ul style="list-style-type: none"> ○ Provide information about residual risks ○ Principle of hierarchy of control, which include: <ul style="list-style-type: none"> ▪ Elimination ▪ Substitution ▪ Engineering control ▪ Administrative control ▪ Personal protective equipment 		
7	<p>PS6 Establish the types of safety and health records to be kept in the DfS Register (DfSR) in accordance with WSH (DfS) Regulations.</p> <p>UK12 DfS Register (DfSR)</p> <ul style="list-style-type: none"> • Identify and list the types of safety and health records relevant to DfS Review Meetings, which include: <ul style="list-style-type: none"> ○ Records of GUIDE 1, 2 and 3 ○ Checklist/matrixes used ○ Risk assessment ○ Safety and health information for contractor and Developer ○ Construction advisory notes ○ Maintenance method advisory notes ○ Safe operating procedures of equipment/machinery 	Theory	<p>1.75h (1h 45mins)</p> <p>includes recapping day 1 learning points and preparation/ conducting DfS Review meeting</p>
8	<p>PS7 Implement a system for documentation of safety and health records in accordance with organisational requirements</p> <ul style="list-style-type: none"> • Propose safety and health documentation system that the DfS professional would implement based on a case scenario <p>UK13 Organisation's documentation system</p> <ul style="list-style-type: none"> • Organisational requirements that should be taken into consideration when establishing safety and health documentation system, may include and is not limited to elements that provide for: <ul style="list-style-type: none"> ○ Clear direction towards identification and location of documents ○ Logical and organised filing for easy location of required document ○ Definition on responsibilities concerning creation, amendment, custody, maintenance and up keeping of documents ○ Authorisation for access to classified documents ○ Revision control ○ Requirements on review of documents ○ Retention periods of documents ○ Back-up arrangement, which may include: <ul style="list-style-type: none"> ▪ Hard copy ▪ Electronic copy • Organisational requirements may include: <ul style="list-style-type: none"> ○ Requirements of management systems ○ Requirements in consideration on: <ul style="list-style-type: none"> ▪ Size of company ▪ Requirements upon considering the scale and complexity of project 	Theory	0.5h (30mins)

	<ul style="list-style-type: none"> Resources available Existing practices 		
9	<p>PS8 Review safety and health records throughout the construction project in accordance with organisation requirements</p> <ul style="list-style-type: none"> Suggest the responsibilities of persons, frequency and scope of the review for safety and health records (GUIDE process, risk register etc) <p>UK14 Safety and health records review procedures</p> <ul style="list-style-type: none"> Describe the steps involved in reviewing of safety and health records which may include: Establish the responsibility, frequency and scope of review of records Check safety and health records for currency, completeness and accuracy Identify safety and health issues Address safety and health issues <p>UK14 Types of safety and health issues</p> <ul style="list-style-type: none"> Examples of safety and health issues that may need to be addressed during design reviews which may include and not limited to: <ul style="list-style-type: none"> Areas where design reviews were not yet started or incomplete Part of design concept that was not fully understood Hazards not identified previously Design changes not finalised DfS register entries incomplete Opened action items for risk control 		
10	<p>PS9 Monitor safety and health issues throughout the construction project in accordance with organisation requirements</p> <ul style="list-style-type: none"> Suggest how safety and health issues related to design will be monitored and addressed in the case scenario Identify areas where monitoring of safety and health issues related to design is required, which include: <ul style="list-style-type: none"> Establish current conditions and status of issues Compare current with desired conditions and status to identify gaps Identify actions required to close gap Review records and monitor safety and health issues throughout the construction project include design stage, construction stage, until handing over to developer for occupation and maintenance 		
11	<p>PS10 Establish the types of safety and health information to be communicated to stakeholders throughout the construction</p> <ul style="list-style-type: none"> List the types of safety and health information to be communicated to different stakeholders at different stages of construction project <p>UK16 Types of safety and health information for communication</p>	Theory	<p>3.75h (3h 45mins)</p> <p>includes Learning Activity 2 and Guide 3 case study</p>

	<ul style="list-style-type: none"> Identify the types of safety and health information to be communicated to different stakeholder, which may include and not limited to: <ul style="list-style-type: none"> Safety and health information provided by the designers and contractors Handover of DfS Register (DfSR) to Developer Sequence of construction works Safety and health hazards affecting relevant stakeholders Implications of hazards Information arising from GUIDE processes Control measures to mitigate risks Safety and health responsibilities of relevant stakeholders Actions required by relevant stakeholders for mitigation of risks Means of communication available to stakeholders 		
12	<p>PS11 Establish means of communication to relevant stakeholders for safety and health information in accordance with organisation requirements.</p> <ul style="list-style-type: none"> Explain how the communication of typical types of safety and health information to relevant stakeholders should be done in the case scenario 		
	<p>UK17 Means of communication to relevant stakeholders</p> <ul style="list-style-type: none"> Identify various means available in the organisation for communication of safety and health information with relevant stakeholders which may include: <ul style="list-style-type: none"> Tendering documents Provision of drawings, specifications, calculations and work statements Provision of safety and health information and records DfS Review Meetings - Sharing of DfS register information Meeting of stakeholders Consultation / dialogue sessions Training/awareness sessions Verbal instruction Telephone communication Formal written correspondence Email 		
13	<p>PS12 Coordinate the flow of relevant information to stakeholders throughout the construction project.</p> <ul style="list-style-type: none"> Explain how the flow of typical types of safety and health information to relevant stakeholders should be coordinated in the case scenario 		
	<p>UK18 Considerations in coordinating flow of safety and health information</p> <ul style="list-style-type: none"> Describe the important considerations in coordinating flow of safety and health information which may include: <ul style="list-style-type: none"> Determining the communication needs for relevant stakeholders 		

	<ul style="list-style-type: none"> ○ Determining the timing at which information should be made available to or gathered from the relevant stakeholders ○ Establishing and use effective means for communication ○ Verifying effectiveness of communication 		
	Written Assessment		2 hours
Total			14 hours

3.3 Recommended Learning Strategies and Methods

3.3.1 Curriculum developers are recommended to adopt the following structure for thinking about and planning a learning strategy:

- Summarise the learning strategy
- In this learning strategy, what learning principles are being applied?
- What learning theories or learning design theories underpin this strategy?
- How will this strategy resolve the identified learning problems? What is it about the learning strategy that will cause people to change in a way that resolves the learning problem?
- How would you describe the experience that learners will go through? How will this experience support their learning?
- What methods or tactics are most likely to be used to support this strategy?
- How will interface and media support this strategy?
- How will this strategy engage learners' interests?
- How will this strategy assess learners' progress or increased competence?

(Extracted from www.networked-learning.com, accessed 19 Sep 2010)

3.3.2 An example of instructional strategy selection for cognitive, affective and psychomotor domains is given in **Annex A**.

3.3.3 A non-exhaustive list of recommended delivery methods is provided below.

- Demonstration
- Practice
- Observation
- Lectures
- Role play
- Group Discussion
- Written Exercise
- Case Study

- Workplace Practice
- Presentation
- Action Learning
- Coaching / Mentoring

3.3.4 Where relevant and appropriate, the learning activities for the unit should be designed to shape or cultivate the expected attitudes of the candidates and to prepare them for their role in the sector.

3.3.5 To enhance the transfer of learning, an andragogical or adult-learning approach to learning is encouraged in the development and delivery of the Competency Unit. Andragogical instructional techniques are designed with these factors in mind:

- Adults are self-directed
- Adults have acquired knowledge and experience through the workplace that can be utilised as a resource for learning
- Adults show a greater readiness to learn tasks that are relevant to their work roles
- Adults are motivated to learn in order to solve problems and address needs
- Adults expect to be able to apply what they learn
- Adults need to be challenged with varied strategies that maintain interest

3.3.6 This unit may be delivered in a combination of simulated environment and off-the-job.

- Content relating to underpinning knowledge and principles may be delivered off-the-job. Off-the-job delivery can be face-to-face in the classroom in a training organisation, or at a workplace venue. Classroom delivery should be interactive and learner-centred, using a range of activities and instructional methods.
- The practical aspects of the Competency Unit, however, should be delivered in simulated workplace settings.

3.3.7 All training delivery should be related to the normal work process and every effort should be made to link the acquisition and application of the knowledge, skills and attitudes to the workplace.

3.3.8 Suggestions for delivery of this Competency Unit are given below:

Competency	Instructional Methods	Remarks
Underpinning Knowledge	Lectures, discussions, case studies, problem-based learning, videos, e- learning resources	<p>The knowledge component of this course is primarily focused on the requirements of:</p> <ul style="list-style-type: none"> • Importance of design for safety and health for construction projects • Phases in the lifecycle of a building and structure • Duties and responsibilities of DfS professionals • Steps and considerations during the preparation for DfS review meetings • GUIDE process and its implementation • Dos and don'ts in coordinating DfS review meetings • Safety and health risks considerations during DfS review meetings • Hazard identification tools • Risk assessment procedures • Types of safety and health records relevant to DfS review meetings • Organisational documentation systems • Safety and health records review procedures • Types of safety and health issues • Types of safety and health information for communication • Means of communication for communication with stakeholders • Considerations in coordinating flow of safety and health information <p>These can be delivered in a classroom using models and slides.</p>

Performance Statements	Lectures, demonstrations, practice	<p>The demonstration and practice may include the following key skills:</p> <ul style="list-style-type: none"> • Advise stakeholders in a construction project on their duties and responsibilities in accordance with WSH(DfS) regulations • Prepare for DfS review meetings in accordance with WSH (DfS) regulations • Coordinate DfS review meetings for consideration of safety and health risks at different phases in the lifecycle of a building and structure • Apply hazard identification tools and risk assessment for DfS review meetings in accordance with organisational procedures • Establish types of safety and health records to be kept in the DfS Register in accordance with WSH(DfS) regulations • Implement a system for documentation of safety and health records in accordance with organisational requirements • Review safety and health records • Monitor safety and health issues in construction projects • Establish types of safety and health information to be communicated to stakeholders • Establish means of communication to relevant stakeholders • Coordinate flow of relevant information to stakeholders
Attributes	Discussions, modelling, sharing	<p>A competent construction worker must have a sense of “safety awareness” and is expected to take personal responsibility for his own safety as well as look out for the safety of his co-workers.</p>

3.4 Trainer's Guide and Learner's Guide and Handouts

3.4.1 The TP is required to prepare a trainer's guide for the course. The guide provides the trainer with information on the course including:

- Course aim
- Learning objectives
- Target audience
- Assumed skills and knowledge
- Course duration
- Class size and trainer /Learner ratio
- Lesson plan
- Course contents and instructional materials according to the course requirements
- Training methodologies
- Training resource requirements
- Course administration instruction

3.4.2 The TP shall also facilitate the learning process by providing each learner with a learners' workbook/handouts to summarise (with illustrations, where possible) key learning points of all the topics covered in the syllabus. This may be in the form of drawings/illustrations rather than words.

3.4.3 The TP is required to submit a cross reference matrix (see **Annex B**) to show that the courseware submitted is aligned to the requirements of the competency standard.

3.4.4 The TP is to ensure that materials used for the training does not infringe on patent, design, copyright and intellectual property rights.

3.4.5 The TP shall maintain a version control of updates made to the course materials for verification by the relevant authorities.

3.5 Training Resources

3.5.1 Training Requirements:

- Training site emergency evacuation route – to be briefed at start of course
- Training SOP must be available before the conduct of the course
- Case studies for discussion

3.5.2 Training Provider Requirements

Training Providers are required to fulfill the following requirements:

- ISO 29993 certification;
- bizSAFE Level 3 certification;
- Blended learning
 - Have developed an SOP to conduct online training and assessment (with online proctoring for supervisor and above courses) when required to do so.
 - For each WSH course, the Training Provider must have at least:
 - a. 1 full time Principal/Director;
 - b. 1 full time WSH Approved Adult Educator/ Trainer/Facilitators for each WSH course¹; and
 - c. 2 approved full time/associate Adult Educator/ Trainer/Facilitators for each of the language.

Training Providers are to inform the WSH Council when they withdraw their training provider status for any WSH course(s), or have their status suspended or terminated by any authority.

Training Providers are to comply with the instruction by either (i) SkillsFuture Singapore (SSG), Ministry of Manpower (MOM) or the WSH Council to stop conducting any WSH Course(s) when an investigation is ongoing, or a non-compliance is being verified. Further actions would be taken when fraudulent acts or significant non-compliances are established.

3.5.3 Total WSH Presentation Slides

Total WSH presentation slides will be issued upon approval of the Training Provider. The materials are provided strictly for the explicit use and guidance of training providers for the conduct of this course. Any other use of the materials or parts thereof, reproduction, publication, distribution, transmission, re-transmission, or storage in a retrieval system in any form, electronic or otherwise, for purposes other than that expressly stated above without the express permission of WSH Council is strictly prohibited.

3.6 Training Venue Requirements

- 3.6.1 Training is to be conducted in a classroom with supporting training slides, videos, case studies for discussion.
- 3.6.2 TP shall ensure the classroom has adequate chairs and writing tables to be comfortably spaced for a class of up to 20 Learners for conduciveness to the learning process. There must also be adequate land space to comfortably conduct the practical training and assessment safely. A time device e.g. clock, lightings and ventilation must be adequate for classroom instruction. Emergency exit routes must be clearly marked out and briefed to the course Learners at the start of the course. Necessary equipment such as projectors, multimedia player, whiteboards, flipcharts and any other equipment essential for instruction purpose must be made available.
- 3.6.3 TP is to adhere to the conditions stipulated in the CTAG Part I and Part II at all times, where applicable. Adequate safety control measures must be undertaken to ensure the safety of the learners and trainers during the conduct of the course/training at all times.

3.6.4 Unless prior approval has been granted by the CB, which had certified its WSH courses, each TP shall maintain and conduct its WSH course at its primary Training Venue. In addition, the TP shall ensure that the following are not shared with any other TP:

- (a) their approved Training Venue/s; and
- (b) Any other equipment or loads, which are used for the conduct of the WSH course.

3.6.5 In the event, where the TP wishes to conduct its WSH theory course(s) at a venue, other than the approved Training Venue, the TP must inform the CB, which had certified its WSH course(s) at the approved Training Venue/s, of its intent to effect such a change, and it must also demonstrate to the CB that:

- (a) It has an approved Training Venue at the registered address;
- (b) That the proposed venue is conducive for learning; and
- (c) That there are no safety and health concerns in relation to the proposed venue/s.

The TP may conduct its WSH theory course(s) at a venue other than the approved Training Venue/s only after obtaining the CB's approval.

3.6.6 The requirement stated at Para 3.6.5 shall apply to a TP for single and multiple usage.

3.6.7 Where the CB has granted approval to the TP to conduct the WSH theory course(s) at an alternate venue, the TP must ensure that:

a) All training and assessment records are kept by the TP, for courses conducted, at the alternate venue. Such records shall include the following documents:

- i. Photographs of the alternate venue;
- ii. Photographs of the WSH theory course(s) being conducted at the alternate venue;
- iii. Layout plan of the alternate venue; and
- iv. Leasing documents;

b) The records mentioned in sub-paragraph 3.6.7(a) above, are continually updated;

c) The alternate venue is only used for the conduct of WSH theory course(s). No practical training/assessment shall be allowed at the alternate venue, unless approval has been granted by the Authorities; and

d) The alternate venue is not occupied and or used by another TP or WSH approved training provider at any time.

3.6.8 The TP must ensure that all Training Venues (including alternate venues) have been approved by the Urban Redevelopment Authority (URA) or the Housing & Development Board ("HDB"), either as a Commercial School (theory based only) or for Industrial Training (theory and practical), before it applies to be certified by the CB. Note: Tenancy agreement (e.g. from JTC Corporation or other Developers) does not constitute a URA approval. Only correspondence

with letterheads bearing the office of the relevant government authorities granting the approval shall be recognised.

- 3.6.9 Paragraph 3.6.8 shall not apply to TP who is applying for a once-off use of the theory training premises.
- 3.6.10 The TP is to note that a CB's approval of any practical training venue is conditioned upon its safe and adequacy of the training facilities and equipment. The TP shall comply with all relevant legislations including but not limited to legislations involving land use, building, fire and safety.

CHAPTER 4: KEY ASSESSMENT ADVICE

This chapter describes the following components:

A description on the general guidelines and requirements for conducting assessment is given in the reference WSQ resource websites in Part II of this document.

4.1 Recommended Assessment Strategies and Methods

4.1.1 There shall be a 2-hour written assessment at the end of the course and an individual project due to be submitted within 4 weeks upon completion of classroom training.

S/N	Assessment Activity	Method/Format	Duration
1	Written Assessment (Closed book)	MCQs/Short Answers	2 hour
2	Individual Project	Written Report	*
Total Assessment Time			2 hours

Individual project to be completed outside of allocated training and assessment hours

4.2 Industry Requirements

- The learner must pass the closed-book written assessment (no retest), before he/she can proceed to submit the individual project (written report). The learner must pass both assessments in order to be issued with the certificate of successful completion. Failure to pass either of the assessments shall render a “Not Yet Competent” outcome for the Learner and he must then re-attempt the course and assessments.
- MOM/WSH Council officers shall conduct audits with or without notice on WSQ WSH TPs.
- To facilitate marking of the assessment papers, TPs shall install the Automated Marking System (AMS) and its associated hardware.
- The TP personnel who is authorised to use the AMS to scan and mark the test via AMS must also ensure that the assessment results are updated in SSG’s Skills Connect system.
- To facilitate uploading of the assessment results, TPs shall install the Automated Marking System (AMS) and its associated hardware.
- The TP personnel who is authorised to use the AMS must also ensure that the assessment results are updated in SSG’s TPGateway.
- TPs are to upload the test results to MOM/ WSH Council no later than 5 calendar days after completion of the courses. All errors must be rectified within 24 hours for re-submission of the affected results to MOM/ WSH Council via WSH TRS. This is in addition to the uploading of assessment results to SSG via TPGateway
- Authorities (i.e. MOM/WSH Council) may request from TPs information on the course. TPs are to ensure that the information given to the Authorities are accurate and updated.

Note: For system(s) or requirement(s) administered by the relevant authorities, i.e. MOM/WSH Council, the TP shall fulfil the requirements and follow up with the agencies accordingly.

4.3 Assessment Instruments and Tools

4.3.1 Assessments instruments and tools will be required to conduct the assessment planned. Examples of such templates include:

- An Evidence Sources Checklist to serve as a reporting snapshot of the types of evidence gathering that may be used.
- A Verbal Assessment Checklist to record answers to questions concerning Underpinning Knowledge if this is used as an alternative to written exercise.
- Written Assessment Checklists as an instrument for the recording of answers to questions concerning the performance statements and underpinning knowledge.
- A Recording and Reporting Assessment Table Format as an instrument for the concise recording of competency and re-assessment information concerning the Competency Unit.

4.4 Assessment Plan

Note: TPs must administer the standard written assessment issued by MOM/WSH Council.

4.4.1 General Guidelines on Assessment

The assessment plan shall comprise the following:

- Overview of the assessment tools and its duration
- Clear instructions on the conduct of the assessment (inclusive of emphasis on Safety for Learners)
- SOP on the upkeep of the confidentiality of the practical/written assessment questions
- Instruments or tools of the practical/written assessment (e.g. question paper, scaffold checklist)
- Practical/written assessment summary record

4.4.2 Principles of Assessment

The assessment plan should be valid, reliable, fair and flexible.

- Valid – Are the assessment methods and tools appropriate and effective? Are the evidence collected relevant to the training?
- Reliability – Are the results consistent from one assessment to another?
- Fair – Are the assessment criteria clear? Do all the trainees know what to expect from the assessment? Will the assessment disadvantage any

trainee? Do the trainees have any recourse for appeals?

- Flexibility – Can the assessment be used for multiple assessments? Are the assessment tools and methods uniform across different approaches and drawing on a range of different methods? Can they be used appropriately to the context, task and individual under assessment?

4.5 Conduct of Assessment

4.5.1 The learner shall be assessed either “Competent” or “Not Yet Competent”. All PS and UK MUST be assessed as ‘Competent’ to be deemed to be competent in the unit; AND The candidate must answer at least 70% of the questions correctly in the closed book written test.

4.5.2 The learner must satisfy the assessment criteria for the individual project, where the candidate addresses at least 75% of the requirements for each question, with reference (but not limited) to suggested answers in the assessment plan.

4.5.3 Written Assessment

TP must adhere to the following guidelines for the written assessment:

- Must administer a 10-question multiple-choice (30 mins) and short answers (1 hr 30 mins) assessment
- Total allocated time for the written assessment is 2 hours.
- During the administration of the written assessment, there shall be an assessor to ensure the integrity of the assessment process. The trainer for the course is not permitted to be the assessor for the same course Learners during the assessment.
- SOP on the upkeep of the confidentiality of the written assessment questions
- The number of attempts a candidate is allowed to be assessed in the written assessment is ONE. The candidate certified “NOT YET COMPETENT” after the assessment, the candidate must be re-coursed.
-

4.6 Briefing to Candidate

4.6.1 The briefing to candidate is to explain the purpose and context of assessment so as to ensure that there are no surprises during the conduct of assessment.

4.6.2 The briefing to candidate shall include the following:

- The assessment requirements and process, including clear instructions on each of the assessment adopted
- Candidates’ rights and the appeal process for assessment outcome

4.6.3 During the briefing, assessors are to establish any special needs and how such needs will be addressed during the assessment.

- 4.6.4 Assessor must seek feedback and ascertain candidates' understanding of the assessment requirements before the commencement of the assessment.

4.7 Recording and Reporting of Assessment Outcome

- 4.7.1 All assessment outcomes must be accurately recorded in the assessment summary record form (see **Annex B**).
- 4.7.2 Assessment outcome will be communicated to the candidate at the end of the assessment.
- 4.7.3 The TP shall maintain a record of the assessment results for 2 years for audit purposes.

4.8 Issuance of “Safety Pass” and the “Certificate of Successful Completion”

- 4.8.1 “Safety Pass/Card” is to be issued, in accordance with the format shown in Annex C, to candidate who is assessed “Competent” in this Competency Unit for the SOC.
- 4.8.2 “Certificate of Successful Completion” is to be issued, in accordance with the format shown in Annex D, to candidate who is assessed “Competent” in this Competency Unit.
- 4.8.3 The issuance of the “Certificate of Successful Completion” is optional for LSPs/TPs who have already issued the “Safety Pass” to candidate who is assessed “Competent” in this Competency Unit.

CHAPTER 5: ADULT EDUCATOR REQUIREMENTS

A developer / trainer / assessor for this module shall possess all of the following:

5.1 Trainer and Assessor Requirements

A trainer and assessor of this course should possess all the following:

- Advanced Certificate in Learning and Performance (ACLP) or Advanced Certificate in Training and Assessment (ACTA) qualification or Diploma in Adult Continuing Education (DACE) or Diploma in Design and Development of Learning for Performance (DDDLP)
- Degree in Architecture, Engineering, Science, Safety and Health or Construction-related disciplines
- More than 10 years of both design and construction experience
- Held positions of project manager, architect, designer or professional engineer for at least 3 years
- Safety and health experience in the construction industry
- Experience in conducting risk assessment
- Experience in conducting training

All trainers/adult educators are required to attain 10 hours (minimum) annually by attending Continuing Professional and Development (CPD) courses conducted by appointed training providers. For more details, refer to Train-the-Trainer (T³) Programme in WSH Council website (www.wshc.sg)

The trainer for the course is not permitted to be the assessor for the same course learners during the assessment.

5.2 Developer Requirements

In addition to the requirements for trainer and assessor above, the developer should possess all the following:

- WSQ curriculum developer pedagogic requirement: The developer must have attained a WSQ Advanced Certificate in Learning and Performance (ACLP), WSQ Advanced Certificate in Training and Assessment (ACTA) or their equivalent. With effect from 1 October 2015, a WSQ Diploma in Adult and Continuing Education (DACE) or Diploma in Design and Development of Learning for Performance (DDDLP) is required;
- WSQ curriculum developer experience: The developer should preferably possess a minimum of one year experience in WSQ-related courseware development; **AND**
- Language proficiency: WPL level 7 or equivalent.

A qualified and experienced developer can work with a Subject Matter Expert with relevant domain qualifications and work experience in developing the courseware.

CHAPTER 6: SUMMARY OF MANDATORY SECTIONS / INFORMATION

This chapter summarises all the mandatory sections and required information, for easy reference. TPs / Adult Educators are expected to note the information indicated in the following Sections and to comply with the stated requirements, where appropriate:

<u>Section</u>	<u>Title</u>
1.5	Recommended Learning Hours (RLH)
1.7	Recommended Class Size and Learner-Trainer Ratio
1.8	Recommended Assessor to Candidate Ratio
3.1	Content Coverage <i>(On percentage of items under Range and Application and Evidence Sources to be covered)</i>
3.5	Training Resources
3.6	Training Venue Requirements
4.2	Industry Requirements
4.4	Assessment Plan
4.5	Conduct of Assessment
5.1	Trainer and Assessor Requirements
5.2	Developer Requirements

CHAPTER 7: RESOURCE INFORMATION

This chapter indicates the various literatures, journals, articles and researched information on the competency unit “Design for Safety”.

Related WSH legislations, industrial code of practice and other references (list is not exhaustive)

- WSH (DfS) Regulations
- Approved Code of Practice for DfS

PART II
WSQ
&
Supporting Resources

Glossary of Terms

TP	TPs 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 used.
Assessment method	The process or technique used to gather evidence. (Bresciano & 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 “programme mission or course/activity purpose, goals as appropriate, in/ended outcomes, methods for gathering, analysing data, and interpreting data for providing evidence to inform decision making.” (Bresciano & Fackler, 2005)
Assessment process	The series of steps which a candidate undertakes within the enrolment, assessment, recording and reporting cycle of assessment.
Assessment tool	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 and knowledge	Assumed skills and knowledge are what 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 and individual’s performance to perform at his/her job effectively.
Competency category	A competency category refers to broad occupational or industry area or function, competency units (CU) that are inter-related are grouped by competency categories.
Competency elements	A competency element is the sub-division of a CU. Competency elements encompasses performance criteria, underpinning knowledge, range and context as well as 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 CU and these are grouped into competency categories and pegged to occupational levels.
Competency Standards (CS)	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.
Competency Unit (CU)	A CU 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 CU are detailed in a CS.
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 a part-time or short courses in occupational subject areas. Also see Pre-employment Training (PET).
Certification Body (CB)	A Certification Body (CB) is an organization accredited by the Singapore Accreditation Council (SAC) to assess and certify a WSH Training Provider's compliance to ISO 29993:2017 and MOM/WSH Council requirements.
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 CU.
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 CS 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 (PC / PS)	Performance criteria or performance statements refer to the expected work performance 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.
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Version Control Record

Version	Effective Date	Changes	Author	Approved By
1.0	31 Oct 2019	Initial version	SSG-MOM	SSG-MOM
2.0	21 Jan 2022	Update	WSH Council	WSH Council
3.0	1 Sep 2023	Updates	WSH Council	WSH Council

Annex A - Instructional Strategy Selection Chart

Instructional Strategy Selection Chart

Instructional Strategy	Cognitive Domain (Bloom, 1956)	Affective Domain (Krathwohl, Bloom, & Masia, 1973)	Psychomotor Domain (Simpson, 1972)
Lecture, reading, audio/visual, demonstration, or guided observations, question and answer period	1. Knowledge	1. Receiving phenomena	1. Perception 2. Set
Discussions, multimedia CBT, Socratic didactic method, reflection. Activities such as surveys, role playing, case studies, fishbowls, etc.	2. Comprehension 3. Application	2. Responding to phenomena	3. Guided response 4. Mechanism
On-the-Job-Training (OJT), practice by doing (some direction or coaching is required), simulated job settings (to include CBT simulations)	4. Analysis	3. Valuing	5. Complex response
Use in real situations. Also may be trained by using several high level activities coupled with OJT.	5. Synthesis	4. Organise values into priorities	6. Adaptation
Normally developed on own (informal learning) through self-study or learning through mistakes, but mentoring and coaching can speed the process.	6. Evaluation	5. Internalising values	7. Origination

The chart does not cover all possibilities, but most activities should fit in. For example, self-study could fall under reading, audio visual, and/or activities, depending upon the type of program you design.

(Extracted from <http://www.nwlink.com/~donclark/hrd/strategy.html>, accessed 19 Sep 2010)

Annex B - Cross Reference Matrix for WSQ Competency Unit

Cross Reference Matrix for WSQ Competency Unit

Performance Statement	Underpinning Knowledge & Range & Application	Assessment Criteria (State what is expected and required from the candidate)	Assessment Methods			Assessment Instruments/Tools	Reference		
			Oral Questioning	Written Assignment	Practical Performance		Trainer' s Guide	Learner' s Guide	Slides
PS1 Identify the needs and expectations of customer populations to develop customer profiles.									
PS 1	UK 1	Tell Me (Knowledge)							
Identify the needs and expectations of customer populations to develop customer profiles.	Sample Format for reference to develop the Cross Reference Matrix								
	<p>Range & Context Research techniques may include:</p> <ul style="list-style-type: none">○ interviews;○ observations;○ surveys;. <p>Research may focus on areas which may include:</p> <ul style="list-style-type: none">○ individual influences on customer behavior;○ social influences on customer behavior; &○ Lifestyle influences on customer behavior.	<ul style="list-style-type: none">○ surveys;○ questionnaires;○ database analysis;○ interpreting third party research output; and○ Use of business excellence tools such as Voice of Customer, Quality Function Deployment (QFD). <p>Identify the needs and expectations of your customers.</p> <p>Show Me (Process) Research the demography of your customers by:</p>	X				10 - 28	9 - 32	10 - 62

I. Overview of Assessment for the Competency Unit

Competency unit:

Purpose of assessment

Context of assessment	Details
Organisational requirement	
Operational environment	
Industry requirement	
Legal requirements	

Assessment venue:

Description of candidates: (at least four characteristics)

Special needs of candidates (at least one special need)

Any other special requirements :(at least one special requirement)

Stakeholders in AP development team and their role:

Title	Name	Support in Developing Assessment Plan

Competency Elements	Methods

Method	Duration	Ratio of assessor to candidate	Remarks
Total		--	--

II. Assessment Matrix

Mapping of Assessment Methods with Performance and Knowledge Requirements

Content	Lecture (Hour)	Practical (Hour)	Assessment Mode	Total (Hour)
Day 2				
Theory: UK1. Importance of design for safety and health for construction projects UK2. Phases in the lifecycle of a building and structure UK3. Duties and responsibilities of DfS professionals UK4. Stakeholders' duties and responsibilities in a construction project UK5. Steps and considerations during the preparation for DfS review meetings UK6. GUIDE process and its implementation in DfS review meetings UK7. Phases of DfS review meetings UK8. Safety and health risks considerations during DfS review meetings UK9. Hazard identification tools UK10. Risk assessment procedures UK11. Types of safety and health records relevant to DfS review meetings UK12. DfS Register (DfSR) UK13. Organisational documentation systems UK14. Safety and health records review procedures UK15. Types of safety and health issues UK16. Types of safety and health information for communication UK17. Means of communication to relevant stakeholders UK18. Considerations in coordinating flow of safety and health information	2		Written Assessment	2
Practical: PS1. Recognise the importance of design for safety and health of a construction project to eliminate or mitigate such risks throughout the different life cycle of a building and structure PS2. Recognise, and advise stakeholders on, the duties and responsibilities of DfS Professionals in accordance with relevant legal requirements and WSH (DfS) Regulations		(outside of allocated trainign and assessment hours)	Individual project	-

PS3. Prepare for DfS review meetings in accordance with WSH (DfS) regulations				
PS4. Coordinate DfS review meetings for consideration of safety and health risks at different phases in the lifecycle of a building and structure				
PS5. Apply hazard identification tools and risk assessment for DfS review meetings in accordance with organisational procedures				
PS6. Establish types of safety and health records to be kept in the DfS Register in accordance with WSH(DfS) regulations				
PS7. Implement a system for documentation of safety and health records in accordance with organisational requirements				
PS8. Review safety and health records throughout the construction project in accordance with organisation requirements.				
PS9. Monitor safety and health issues throughout the construction project in accordance with organisation requirements				
PS10. Establish types of safety and health information to be communicated to stakeholders throughout the construction project				
PS11. Establish means of communication to relevant stakeholders for safety and health information in accordance with organisation requirements				
PS12. Coordinate the flow of relevant information to stakeholders throughout the construction project				
WRITTEN /PRACTICAL ASSESSMENT				
TOTAL (Hours) – Written Assessment				2.0
TOTAL (Hours)				2.0

III. Assessment Specifications for Written Assessment

These instructions concern the written assessment of the Learner's competency.

Specification Item	Details on Specifications
Learning outcome	Fulfil the course learning objectives for all topics to be assessed
Duration	2 hours
Venue	Classroom
Set up	<ul style="list-style-type: none">• Classroom setup for 20 Learners.• Tables & chairs for individual seating• Projector and monitor• Whiteboard & markers of different colours• Whiteboard duster• 2B pencil and eraser for each Learner• Printed answer sheet• Common Clock
Conduct of the Written Test	<ul style="list-style-type: none">• Brief Learners to check if they have been given the correct test set• Brief Learners on the time allocated for the test• Brief Learners on the close book test format.• Brief Learners that they cannot refer to any material or notes or discuss the questions with any other Learners during the test• Brief Learners that they are allowed to ask the assessor to explain the question/s• Brief Learners on the 70% passing mark requirement

V. Assessment Record for Written Assessment

Candidate's

Name: _____ End Time : _____

Candidate's ID

Number : _____ Start Time : _____

Assessor's Name: _____

KNOWLEDGE CHECKLIST				
Underpinning Knowledge	Assessment Criteria	Tick		Evidence of 'C' and 'NYC' must be recorded
		C	NYC	
UK 1 ...	<ul style="list-style-type: none"> Sample Questions..... Suggested Answers... 			
UK 2 ...	<ul style="list-style-type: none"> Sample Questions..... Suggested Answers... 			
UK 3 ...	<ul style="list-style-type: none"> Sample Questions..... Suggested Answers... 			
UK 4 ...	<ul style="list-style-type: none"> Sample Questions..... Suggested Answers... 			

VI. SUMMARY ASSESSMENT RECORD

Assessment Centre :	
Competency Unit :	
Candidate Name :	
Candidate ID No. :	
Assessor Name :	
Assessment Method :	Written Assessment (WA)
Assessment Date :	
Start Time :	
End Time :	

Summary

Performance Statement	Result

This candidate has been assessed as:

- ☐ COMPETENT
- ☐ NOT YET COMPETENT

Assessor signature:_____

Candidate signature:_____

Feedback on outcome by assessor/feedback by candidate:

In the event of “NYC” result:

- ☐ Candidate does not wish to appeal
- ☐ Candidate wishes to appeal

Candidate signature:

VII. Assessment Tools Required and other Related Documents

- **Other required Assessment Tools for this assessment plan**
e.g. case studies, role play scenarios, written test papers, logistics checklist

- **Pre-Assessment Briefing Checklist**

- **Appeal Process**

- **Version Control Record**

Version	Effective Date	Changes	Author
1.0		New release	

- **Other required Assessment Tools for this assessment plan**
e.g. case studies, role play scenarios, written test papers, logistics checklist

CODE OF PRACTICE FOR ASSESSORS

Assessment specialists have developed an international code of ethics and practice (The National Council for Measurement in Education (NCME)). The Code of Practice below is based on the international standards.

1. The differing needs and requirements of the person(s) being assessed, the local enterprise(s) and/or industry are identified and handled with sensitivity.
2. Potential forms of conflict of interest in the assessment process and/or outcomes are identified and appropriate referrals are made, if necessary.
3. All forms of harassment are avoided throughout the planning, conduct, reviewing and reporting of the assessment outcomes.
4. The rights of the candidates (s) are protected during and after the assessment.
5. Personal or interpersonal factors that are not relevant to the assessment of competency must not influence the assessment outcomes.
6. The candidate(s) is made aware of rights and processes of appeal.
7. Evidence that is gathered during the assessment is verified for validity, reliability, authenticity, sufficiency and currency.
8. Assessment decisions are based on available evidence that can be produced and verified by another assessor.
9. Assessments are conducted within the boundaries of the assessment system policies and procedures.
10. Formal agreement is obtained from both the candidate(s) and the assessor that the assessment was carried out in accordance with agreed procedures.
11. Assessment tools, systems, and procedures are consistent with equal opportunity legislation.
12. The candidate(s) is informed of all assessment reporting processes prior to the assessment.
13. The candidate(s) is informed of all known potential consequences of decisions arising from an assessment, prior to the assessment.
14. Confidentiality is maintained regarding assessment result.
15. Results are only released with the written permission of the candidate(s).
16. The assessment results are used consistently with the purposes explained to the candidate.

17. Self-assessments are periodically conducted to ensure current competencies against the assessment and Workplace Training Competency Standards.
18. Professional development opportunities are identified and sought.
19. Opportunities for networking amongst assessors are created and maintained.
20. Opportunities are created for technical assistance in planning, conducting and reviewing assessment procedures and outcomes.

Annex C - Format of Safety Pass

Format of Safety Pass

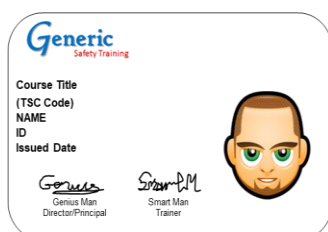
Training Providers are to issue a Safety Pass to workers who have successfully completed and passed the course. Issue of Certificate of Course Completion is Optional.

Do note that the reference below is intended only to present the format of the pass, and should not be used as an actual template for direct printing.

Guidelines for the credit card size pass for MOM WSH courses by TPs

3 $\frac{3}{8}$ × 2 $\frac{1}{8}$ inch (85.60 × 53.98 mm)

Front view



Font Type: Arial
Font size (Course title): Recommended 8pt or larger
Font size (Others): Recommended 6pt or larger
Photo size: 3.1cm X 2.4cm

- Pass should contain no less than the information depicted in the guide
- TP may use their own reference format for serial number
- Course Title should be the title as indicated in the WSQ Framework(CS/CTAG). The Technical Skills and Competency (TSC) Code and Title, should also be printed in parentheses () aligned to the title reflected in either the Competency Standards (CS) or TSC. However, it is not required to print the TSC Course name if it is the same as the SC/CTAG title
- ID should be FIN, NRIC Passport Number or any unique official identifier
- Course Venue should reflect address of training centre (not business office, etc) which pass holder attended
- Trainer signature should reflect the trainer that conducted the course

Back view

1. Use of card is governed by terms and conditions of < Name of Training Provider>
2. < Name of Training Providers> is a SkillsFuture Singapore Agency's Training Provider at the date of issuance of the pass
3. This card is not transferrable
4. The course is conducted @ < Course venue>
5. Holder of the card has been certified competent in the <Course Title> on the issued date as indicated in front.
6. This card will expire <xx> years from the date of issue.
7. This card is the property of < Name of Training Provider> and must be returned on request.
8. Card shall be retained if it has been tampered with, misused or replaced.
9. This card is issued by < Name of Training Provider>. If found, please return to < Name of Training Provider>. at <Address of < Name of Training Provider>..
10. For enquiries, please contact < Name of Training Provider>. > at <hotline>

Font Type: Arial
Font size : Recommended 6pt or larger

Annex D - Certificate of Successful Completion

Certificate of Successful Completion

Training Providers are to issue a Safety Pass to workers who have successfully completed and passed the course. Issue of Certificate of Course Completion is Optional.

3 inch 10pt 20pt 10pt 16pt 12pt 10pt 16pt 10pt 12pt 10pt 10pt 1 inch	<div style="border: 1px solid black; padding: 5px; width: fit-content;">Font type: Arial Font size: Recommended as stipulated Header/Footer space: Recommended as stipulated</div>	<p><Official Logo/Name of TP></p> <p style="text-align: right;">Serial Number: <xxx></p> <h3 style="text-align: center;">CERTIFICATE OF SUCCESSFUL COMPLETION</h3> <p style="text-align: center;">is awarded to</p> <p style="text-align: center;"><Name of Trainee></p> <p style="text-align: center;">< ID ></p> <p style="text-align: center;">for successful completion of the <Course Title></p> <p style="text-align: center;"><TSC Title/Code></p> <p style="text-align: center;">< Name of TP ></p> <p style="text-align: center;"><small><TP approved by SkillsFuture Singapore></small></p> <p style="text-align: center;">@ < Training venue></p> <p style="text-align: center;">from</p> <p style="text-align: center;"><Training Date/s></p> <p style="text-align: center;">Validity: < x Years from last date of course/ NA></p> <div style="display: flex; justify-content: space-between; align-items: flex-end; margin-top: 20px;"><div style="text-align: center;"> Genius Man Director / Principal Training Division <Name of TP> / Company Stamp</div><div style="text-align: center;"> Smart Man Trainer Training Division <Name of TP></div></div> <p style="font-size: small; color: blue; margin-top: 10px;"><Name of TP> UEN: <XXX> <Office Address> Tel: <xxx> Fax: <xxx> Website: <xxx> Email: <xxx></p>
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- Certificate should contain no less than the information depicted in the guide
- TP may use their own reference format for serial number
- ID should be FIN, NRIC Passport Number or any unique official identifier
- For TP Course, Course Title should be the corresponding title as indicated in WSQ System Framework(CS/CTAG). The Technical Skills and Competency (TSC) Code and Title should be printed in parentheses () aligned to the title reflected in either the Competency Standards (CS) or TSC. However, it is not required to print the TSC course name if it is the same as the CS/CTAG Title
- Course Venue should reflect address of training centre (not business office, etc) which pass holder attended
- Certificate should indicate that <<Name of TP>> is a Training Provider (TP) approved by SkillsFuture Singapore for <<Course Title of corresponding course>>
- Trainer signature should reflect the trainer that conducted the course
- Management of safety certificate should be in accordance to the requirements under TP scheme