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Learner Guide

1a

Problem Identification (PI)

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TSC Competency Code: RET-ACE-3006-1.1

1c



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1. Course Aim

The “Advanced Certificate in Workplace Safety and Health” course provides individuals with key competencies in WSH to become a WSH coordinator. Trainees will learn the skills to coordinate the implementation of WSH management systems at the supervisory level and gain an intermediate understanding of the relevant WSH regulations. This course is a recognised qualification for registration as a WSH Coordinator under the WSH Act.

WSH Coordinators are those who assist the occupier of a workplace to identify any unsafe condition in the work-place; recommend and implement measures to remedy the unsafe conditions.

- ✓ Carry out WSH compliance inspections
- ✓ Support audit process
- ✓ Coach team members on how to conduct routine checks on

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- with activities
- ✓ Analyse data on WSH performance, conditions and practices
- ✓ Evaluate WSH non-compliance, unsafe work conditions and practices to identify WSH performance gaps
- ✓ Evaluate impact of health and safety hazards, including personal risk factors to employees' safety and prioritise issues based on severity
- ✓ Report findings of WSH compliance inspections and routine checks
- ✓ Recommend and implement actions to improve WSH performance and control risks
- ✓ Review effectiveness of implemented improvements on an on-going basis
- ✓ Implement emergency preparedness and response plans (EPRPs) and communicate plans to stakeholders
- ✓ Coordinate EPRP drills and maintenance of emergency response equipment

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- ✓ Conduct WSH incident and accident investigations
- ✓ Review investigation findings to identify causes of incidents and accidents
- ✓ Propose corrective and preventive measures to address root cause of incidents
- ✓ Prepare incident and accident reports
- ✓ Monitor implementation of corrective and preventive actions

To attain the Advanced Certificate in WSH, learners are required to complete the following competency units/modules and be certified 'COMPETENT'.

MODULE 1 – Workplace Safety and Health System Management (WSHSM)

MODULE 2 – Workplace Safety and Health Performance Management (WSHPM)

MODULE 3 – Workplace Safety and Health Incident Management (WSHIM)

MODULE 4 – Workplace Safety and Health Policy Development (WSHPD)

MODULE 5 – Hazards Identification (HI)

MODULE 6 – Workplace Safety and Health Culture Management (WSHCUL)

MODULE 7 – Emergency Response Management (ERM)

MODULE 8 – Workplace Communications (WPC)

and

Prerequisite Technical Skills & Competencies(TSC)

Select any one module from this group

RET-ACE-3006-1.1 Problem Identification (Eversafe Academy offering this module)

WPH-BIN-3067-1.1 Innovation Management

BPM-GMT-4014-1.1 Team Effectiveness Management

Select any one course from this group

(You are assumed to have already completed any of the following course)

WPH-WSH-3081-1.1 Workplace Safety and Health Management in Manufacturing Industry

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WPH-WSH-3079-1.1 Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories

WPH-WSH-3085-1.1 Workplace Safety and Health Supervision in Tunnelling Construction

WPH-WSH-3080-1.1 Workplace Safety and Health Management in Construction Industry

WPH-WSH-3082-1.1 Workplace Safety and Health Management in Marine Industry

WPH-WSH-3083-1.1 Workplace Safety and Health Management in Service Industry

2. Module Aim

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The “Problem Identification” is one of the Competency Unit in WSQ Advanced Certificate in Workplace Safety and Health course.

On completion of this unit, the learner will acquire the skills to work with a team of subordinates in practising problem-solving and decision-making, which includes anticipating and identifying potential problems, facilitating team’s effort to resolve the problem, making appropriate decisions and seeing implementation plans through.

3. Learning Objectives

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At the end of the course, the trainees are expected to understand and demonstrate the following essential Abilities and Knowledge. These would be taught via a combination of lecture, group discussions, presentations, learning activities, case study and hands-on practice.

The module covers the following Abilities (A) and enable the learners to:

- A1. Identify symptoms that could lead to potential problem at the workplace
- A2. Articulate problems in a clear and concise manner
- A3. Provide recommendations to resolve the issues at hand

- A4. Apply logical deduction to anticipate and detect problems at the workplace
- A5. Analyse relevant information surrounding the perceived problems
- A6. Identify the exact problem using elimination process, objective reasoning or process questioning
- A7. Analyse the root causes of the problems at the workplace using appropriate problem solving tools and techniques
- A8. Evaluate the effectiveness of implemented solutions and implementation plans by analysing feedback gathered from relevant sources

The module covers the following Knowledge (K) elements:

- K1. Sources from which symptoms of potential problems may be Identified
- K2. Possible sources of problem
- K3. Ways to identify impact of a problem on one's job responsibilities and other parties involved
- K4. Procedure for evaluating selected ideas for problem-solving
- K5. Factors to consider in selecting suitable modes of communication
- K6. Methods to determine the strengths and limitations or constraints of each selected idea
- K7. Areas of impact from implementation of an action plan
- K8. Types of corrective actions
- K9. Reflective mechanisms for the entire problem solving process

4. Target Audience

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The following are the target groups and it would be relevant to include but not limited to:

- ✓ WSH Supervisor,
 - ✓ WSH Coordinator,
 - ✓ SHE Coordinator,
 - ✓ HSE Coordinator,
 - ✓ EHS Coordinator,
 - ✓ Safety Coordinator ,
- personnel whose job responsibility involves supervising, coordinating

WSH matters or implementing WSH programmes are to be eligible to attend this course.

5. Assumed Skills and Knowledge 26

Learners are assumed to:

- ES Workplace Literacy and Numeracy Level 5 or GCE “N” Level English grade 5 & Mathematics grade 5; AND
- Possesses WSH skills and knowledge equivalent to that of Certificate in WSH with at least 1 year of WSH relevant working experience

6. Module Duration 3b

Total Learning Hours 24 Hours = (Training Hours: 18 Hours 45 Minutes and Assessment Hours 2 Hours 15 Minutes)

7. Class Size & Trainer/Learner Ratio 27

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- ✓ Maximum Class Size: 25
- ✓ Trainer-Learner ratio: 1: 25
- ✓ Attendance Requirements: 75%

8. Assessment Information 3a and 3c

Assessment Tools	Ratio of Assessor to Candidate	Duration
Written test1222 (Open Book, Individual)	1 to 25	1 Hours 30 Minutes
Case-Study Assessment (Open Book, Individual)	1 to 25	45 Minutes
		<u>2 hours 15 minutes</u>

The trainee needs to pass both **Written Assessment** and the **Case-Study Assessment** in order to be issued with the certificate of successful completion.

The candidate will be assessed as to whether he/she is “Competent” (“C”) or “Not

Yet Competent" ("NYC") through the assessment of all the Ability and Knowledge competency elements.

9. Lesson Plan 28

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Total Delivery Hours: 24 Hours including 2 Hours 15mins of assessment		
1. Total Delivery Hours	: 24 Hours	3b
2. Training Hours	: 21 Hours 45 Minutes	
2a. Class room Theory	: 17 Hours 55 Minutes	
2b. Classroom Blended Learning ^{*1}	: 50 Minutes	
2C. E-Learning	: 3 Hours	
3. Assessment Hours (3a+3b)	: 2 Hours 15 Minutes	3c
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3a. Written Assessment	: 1 Hour 30 Minutes	
3b. Case Study Assessment	: 45 Minutes	

Day 1 : 8.00 AM to 7.00 PM (9 Hours 30 Minutes)

Day 2 : 8.00 AM to 6.45 PM (9 Hours 15 Minutes)

Day 3: 8.00 AM to 10.15 AM (2 Hours 15 Minutes) Examination)

***1 Classroom Blended Learning (Total 50 Minutes)**

- BL - Instant Performance Reflection (4 Topics) - 20 Minutes
- BL - Micro Learning Using the QR Code - 30 Minutes

Flexible Home Based Blended Learning (Outside the Lesson Plan Hours)

- Blended Learning Activity - EAbot

- 30 Minutes

2c) E-learning - 3 hours

Ability 1. Identify symptoms that could lead to potential problem at the workplace

Ability 2. Articulate problems in a clear and concise manner

Ability 3. Provide recommendations to resolve the issues at hand

Ability 5. Analyse relevant information surrounding the perceived problems

Ability 7. Analyse the root causes of the problems at the workplace using appropriate problem solving tools and techniques

Explanation

Learners are required to complete all the e-learning modules after attending each day classroom facilitated training. This is to ensure that they have reasonable knowledge of the topics covered.

Learners will be given ample opportunity to share their thoughts and inputs with their trainers off-line via email, echat, phone, etc. They can contact their trainers at any time during the respective module 24/7.

Additional time are allotted during classroom facilitated training for Q&A. Trainer will conduct quick revision but ensure that all trainees have proper understanding of the topics. Trainer may share the self-assessment questions and answers with the trainees as a form of revision.

Trainees will be encouraged to give feedback. Survey forms will be issued to these trainees to obtain feedback on their e-learning experiences. These feedback will be taken into consideration to continually improve the e-learning process.

Lesson Plan

(Day-1) 8.00am to 7.00PM (9 Hours 30 Minutes)

Time / Duration	Contents		Instructional Mode / Technique	Training Aids (TG, LG, PPT)
	Performance Statements / Underpinning Knowledge / Topics	Sub Topics		
8.00 AM – 8.30 AM		<u>Introduction</u> (a) Self-introduction and getting to know	Lecture	• PPT

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(30 Minutes)		participants (b) Safety and evacuation procedures (c) Overview of Competency Unit (d) Training Delivery (e) Assessment Requirements (f) Explanation on e-learning modules	Discussion	
8.30 AM – 10.00 AM (1 Hour 30 Minutes)	A1. Identify symptoms that could lead to potential problem at the workplace	K1. Sources from which symptoms of potential problems may be Identified <u>E-Learning Revision 5 Minutes (Part 1)</u>	Lecture with Q & A	• PPT
Tea Break 10.00 AM to 10.15 AM				
10.15 AM – 11.30 AM (1 hour 15 Minutes)	(Continued....) A1. Identify symptoms that could lead to potential problem at the workplace	K2. Possible sources of problem <u>E-Learning Revision 5 Minutes (Part 2)</u>	Lecture with Q & A	• PPT
11.30 AM – 12.10 PM (40 Minutes)		Learning Activity 1 Duration: 40 Minutes (Group 3 to 5) Participants will be given a copy of verdict of the court case. 1) Key contributory factors that resulted in the accident. 2) What is stated in the section 12(1) of the WSH Act? 3) List the key Learning points noted the court verdict. (Heading Only) 4) The safety briefing done by company was found to be ineffective. 5) List any four ideas for the effective risk assessment briefing to the workers instead of conducting just a paper exercise. Participants are required to find the following: Trainer will summarise the learning points.	Group Discussion	LA PPT LA work sheet
12.10 PM	Instant	Blended Learning Activity 1-	Facilitat	SSTM

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– 12.15 PM (5 Minutes)	Performance Reflection- 1 (IPR 1) (5 mins)	IPR 1 Instant Performance Reflection (IPR 1 (5 mins) a. Learning Objectives: To check the ability of the students to apply their knowledge at workplace	or to launch the IPR 1 from the SSTM	
Lunch Break 12.15 PM to 1.15 PM				
1.15 PM – 2.15 PM (1 hour)	A2. Articulate problems in a clear and concise manner	2.1 Reasons to articulate problems in a clear and concise manner <u>E-Learning Revision 5 Minutes (Part 3)</u>	Lecture with Q & A	• PPT • Video
2.15 PM – 3.00 PM (45 Minutes)		Learning Activity 2 Duration: 45 Minutes (Group 3 to 5) The officers from Ministry of Manpower visited your workplace (Construction Site / or Ship yard / or a manufacturing Factory) and issued full Stop Work Order (SWO). The management asked to solve this problem as soon as possible so that the SWO can be lifted and operation can start again. ➤ What is the problem? ➤ What is the immediate next step to take? ➤ What are the steps to take after the immediate actions? ➤ How you going to convince the MOM officers to lift the SWO. ➤ What actions you take to prevent the repeat of this incident. ➤ Trainer will summarise the learning points.	Group Discussion	LA PPT LA work sheet

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		The trainer will summarise the learning points.		
Tea Break 3.00 PM to 3.15 PM				
3.15 PM – 4.00 PM (45 Minutes)	A3. Provide recommendations to resolve the issues at hand	K6. Methods to determine the strengths and limitations or constraints of each selected idea <u>E-Learning Revision 10 Minutes (Part 4)</u>	Lecture with Q & A	• PPT
4.00 PM – 4.30 PM (30 Minutes)	A4. Apply logical deduction to anticipate and detect problems at the workplace	K3. Ways to identify impact of a problem on one's job responsibilities and other parties involved	Lecture with Q & A	• PPT • Video
4.30 PM – 5.00 PM (30 Minutes)		Learning Activity 3 Duration: 30 Minutes (Group 3 to 5) You are a WSH Co-ordinator in a shipyard. One day during the lifting operations a mobile crane suddenly toppled. Luckily no one was injured in the incident. Your management ask you not to report this incident to the authorities. How do you approach and solve this issue? Your reply may include the following: 1. Legal reasons (Including stating of the relevant clauses of the legislation) that the incident must be reported to the authorities. 2. Consequences of non-reporting.. The trainer will summarise the learning points.	Group Discussion	LA PPT LA work sheet

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5.00 PM – 6.10 PM (1 Hour 10 Minutes)	A5. Analyse relevant information surrounding the perceived problems	K4. Procedure for evaluating selected ideas for problem-solving <u>E-Learning Revision 5 Minutes (Part 5)</u>	Lecture with Q & A	• PPT • Video
6.10 PM – 6.55 PM (45 Minutes)		Learning Activity 4 Duration: 40 Minutes Worker Fall through roof skylight <ul style="list-style-type: none"> ➤ 1. Draw the ishikawa Fishbone Diagram with the information given above. ➤ 2. Identify the basic causes of the accident ➤ 3. Identify the root causes of the accident 4. List the Preventive actions 	Group Discussion	LA PPT LA work sheet
6.55 PM – 7.00 PM (5 Minutes)	Instant Performance Reflection-1 (IPR 2) (5 mins)	Blended Learning Activity 1- IPR 2 Instant Performance Reflection (IPR 2 (5 mins) b. Learning Objectives: To check the ability of the students to apply their knowledge at workplace	Facilitator to launch the IPR 1 from the SSTM	SSTM

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Day 1 E-learning – (2 Hour 10mins)

Abilities (A)	Knowledge (K)	Total E-Learning slides	Total Interactive Questions	Time
A1	K1. Sources from which symptoms of potential problems may be Identified K2. Possible sources of problem	1 -23	1	50 Minutes
A2	-	19 - 31	1	30 Minutes
A3	K6. Methods to determine the strengths and limitations or constraints of each selected idea	32 - 41	1	30 Minutes
A5	K4. Procedure for evaluating selected ideas for problem-solving	42 - 50	1	20 Minutes

Learners are required to complete all the e-learning modules after attending each day classroom facilitated training. This is to ensure that they have reasonable knowledge of the topics covered.

Trainer to monitor closely and track individual on their E-Learning progress.

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(Day-2) 8.00am to 6.45PM (9 Hours 15 Minutes)

Time / Duration	Contents		Instructional Mode / Technique	Training Aids (TG, LG,PPT)
	Performance Statements / Underpinning Knowledge / Topics	Sub Topics		
8.00 AM – 8.15 AM (15 Minutes)		Review of lessons of Day 1	Discussion	•
8.15 AM – 8.45 AM (30 Minutes)	A5. Analyse relevant information surrounding the perceived problems	K4. Procedure for evaluating selected ideas for problem-solving	Lecture with Q & A	PPT
		Learning Activity 5 Duration: 30 Minutes (Group 3 to 5)		

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<p>8.45 AM – 9.15 AM (30 Minutes)</p>		<p>A worker is using a “A frame” ladder to check and repair the electrical wire inside the false ceiling. The following are the findings: He was standing on the top most step of the A frame ladder. There was no buddy system in place. The supervisor just instructed him to carryout the job without any further information.</p> <p>1. Identify the problem in the workplace 2. Who are the responsible parties 3. What are the corrective and preventive actions you take to solve the problem?</p> <p>The trainer will summarise the learning points.</p>	<p>Group Discussion</p>	<p>LA PPT LA work sheet</p>
<p>9.15 AM – 10.00AM (45 Minutes)</p>		<p>Learning Activity 6 Duration: 40 Minutes (Group 3 to 5)</p> <p><input type="checkbox"/> A worker who was using the “A Frame” ladder (Assume the worker in the previous learning activity) fall from 3 Metre height and seriously injured. He was given 1 Month Medical Leave. The authorities issued a “STOP WORK ORDER” for 3 days for the poor safety management in the workplace. Assume there are 20 persons are working from top management to workers. (You can assume other machineries, equipment's etc....)</p> <p><input type="checkbox"/> 1. Estimate the loss incurred by the company due to the stop work order and the accident. (Refer Sample Template for reference)</p> <p><input type="checkbox"/> 2. The trainer may randomly choose one trainee for each of the topic (Presentation about 10 Minutes). The trainer shall summarise the learning points.</p>	<p>Group Discussion</p>	<p>LA PPT LA work sheet</p>
<p style="text-align: center;">Tea Break 10.00 AM to 10.15 AM</p>				
<p>10.15 AM – 12.10 AM</p>	<p>A6. Identify the exact problem</p>	<p>K7. Areas of impact from implementation of an action plan</p>	<p>Lecture with Q & A</p>	<p>• PPT</p>

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(1 Hour 55 Minutes)	using elimination process, objective reasoning or process questioning			
12.10 AM – 12.15 PM (5 Minut es)	Instant Performance Reflection- 1 (IPR 2) (5 mins)	Blended Learning Activity 1- IPR 3 Instant Performance Reflection (IPR 3 (5 mins) c. Learning Objectives: To check the ability of the students to apply their knowledge at workplace	Facilitat or to launch the IPR 1 from the SSTM	SSTM
Lunch Break 12.15 PM to 1.15 PM				
1.15 PM – 2. 30 PM (1 Hour 15 Minutes)	A7. Analyse the root causes of the problems at the workplace using appropriate problem solving tools and techniques	K5. Factors to consider in selecting suitable modes of communication Created with a trial version of Synctusion Word library E-Learning Revision 5 Minutes (Part 6)	Lecture with Q & A	PPT
2.30 PM – 3.00 PM (30 Minutes)		Blended Learning Activity 2 (Micro Learning-BL) (Micro-learning on Total WSH) Duration: 30 mins (Group) <ul style="list-style-type: none"> • Scan the QR code • Play the video • Discuss the learning points in the group • Answer the questions Trainer will summarise the learning points	Launch Micro Learning QR Code	LA PPT LA work sheet

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Tea Break 3.00 PM to 3.15 PM				
3.15 PM – 4.00 PM (45 Minutes)	A7. Analyse the root causes of the problems at the workplace using appropriate problem solving tools and techniques (Continued.)	K8. Types of corrective actions <u>E-Learning Revision 5 Minutes (Part 7)</u>	Lecture with Q & A	• PPT
4.00 PM – 5.30 PM (1 Hours 30 Minutes)	A8. Evaluate the effectiveness of implemented solutions and implementation plans by analysing feedback gathered from relevant sources (Continued...)	K9. Reflective mechanisms for the entire problem solving process	Lecture with Q & A	•
5.30 PM – 6.00 PM (30 Minutes)		Learning Activity 7 Duration: (Group 3 to 5) You are a WSH Co-ordinator in a construction project. One day two different company workers are fighting in the workplace. How do you resolve the problem? Your reply may include the following: Immediate actions at the scene 2. Future actions to be taken to prevent the recurrence ..	Group Discussion	LA PPT LA work sheet

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		<p>The trainer shall summarise the learning points.</p> <p>The trainer shall summarise the learning points.</p>		
6.00 PM – 6.05 PM (5 Minutes)	Instant Performance Reflection- 1 (IPR 2) (5 mins)	<p>Blended Learning Activity 1- IPR 4</p> <p>Instant Performance Reflection (IPR 4 (5 mins)</p> <p>d. Learning Objectives: To check the ability of the students to apply their knowledge at workplace</p>	Facilitat or to launch the IPR 1 from the SSTM	SSTM
6.05 AM – 6.45 PM (40 Minutes)		<p>Recap of the topics covered on Day 1 and Day 2</p> <p>Total WSH</p>	Lecture with Q & A	PPT

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Day 2 - E-learning – (50mins)

Abilities (A)	Knowledge (K)	Total E-Learning slides	Total Interactive Questions	Time
A7	K5. Factors to consider in selecting suitable modes of communication K8. Types of corrective actions	51 -72	1	50 Minutes

Learners are required to complete all the e-learning modules after attending each day classroom facilitated training. This is to ensure that they have reasonable knowledge of the topics covered.

Trainer to monitor closely and track individual on their E-Learning progress.

(Day-3) 8.00AM to 10.15 AM (2 Hours 15 Minutes)

Time / Duration	Contents				
	Performance Statements / Underpinning Knowledge / Topics	Sub Topics			
8.00 AM – 8.45 AM (45 Minutes)	Assessment 1	Case Study Assessment <ul style="list-style-type: none"> Read the given scenario in the question paper Answer the all the questions based on given scenario 	<ul style="list-style-type: none"> Individual Open Book 		
8.45 AM – 10.15 AM (1 Hour 30 Minutes)	Assessment 2	Written Assessment <ul style="list-style-type: none"> Answer all the questions 	<ul style="list-style-type: none"> Individual Open Book 		

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10. Course contents and instructional Material

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