

COMPETENCY STANDARDS

COMPUTER SECURITY INCIDENT HANDLING LEVEL I



INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
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**TABLE OF CONTENTS
ICT SECTOR**

**COMPUTER SECURITY INCIDENT HANDLING
LEVEL I**

	Page No.
SECTION 1	
COMPUTER SECURITY INCIDENT HANDLING LEVEL I DESCRIPTION	1
SECTION 2	
COMPETENCY STANDARDS	2 - 52
• Basic Competencies	2 - 33
• Common Competencies	34 - 41
• Core Competencies	42 - 52
SECTION 3	
TRAINEE ENTRY REQUIREMENTS TRAINER'S QUALIFICATIONS LIST OF TOOLS, MATERIALS AND EQUIPMENT TRAINING FACILITIES	53- 55
3.1 Trainee Entry Requirements	53
3.2 Trainers Qualification	53
3.3 List of Tools, Equipment and Materials	54
3.4 Training Facilities	55
ACKNOWLEDGEMENT	56 – 57

COMPETENCY STANDARDS COMPUTER SECURITY INCIDENT HANDLING LEVEL I

Section 1 COMPUTER SECURITY INCIDENT HANDLING LEVEL I

The Computer Security Incident Handling Level I consist of competencies that a person must achieve to provide an appropriate response to an event/incident, ensure efficient escalation and ticketing and to ensure privacy and confidentiality of all security events/incidents.

This Qualification is packaged from the competency map of the Information and Communication Technology (ICT) Industry as shown in Annex A.

The units of competency comprising this qualification include the following:

UNIT CODE BASIC COMPETENCIES

400311101	Receive and respond to workplace communication
400311102	Work with others
400311103	Solve/address routine problems
400311104	Enhance self-management skills
400311105	Support innovation
400311106	Access and maintain information
400311107	Follow occupational safety and health policies and procedures
400311108	Apply environmental work standards
400311109	Adopt entrepreneurial mindset in the workplace

UNIT CODE COMMON COMPETENCIES

ICT315202	Apply quality standards
ICT311203	Perform Computer Operations

UNIT CODE CORE COMPETENCIES

CS-ICT25205	Provide an appropriate response to an event/incident
CS-ICT25206	Ensure efficient escalation and ticketing
CS-ICT25207	Ensure privacy and confidentiality of all security event/incident

A person who has achieved this Qualification is competent to be:

- Computer Security Incident Handler (L1)
- Computer Security Support Staff
- Computer Security Help Desk Staff

SECTION 2 COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common and core units of competency required in **Computer Security Incident Handling Level I**.

BASIC COMPETENCIES

UNIT OF COMPETENCY : RECEIVE AND RESPOND TO WORKPLACE COMMUNICATION

UNIT CODE : 400311101

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to receive, respond and act on verbal and written communication.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Follow routine spoken messages	1.1 Required information is gathered by listening attentively and correctly interpreting or understanding information/ instructions 1.2 Instructions/ information are recorded in accordance with workplace requirements 1.3 Instructions are acted upon immediately in accordance with information received 1.4 Clarification is sought from workplace supervisor on all occasions when any instruction/ information is not clear	1.1. Organizational policies/guidelines in regard to processing internal/external information 1.2. Ethical work practices in handling communications 1.3. Overview of the Communication process 1.4. Effective note-taking and questioning techniques	1.1. Conciseness in receiving and clarifying messages/ information/ communication 1.2. Accuracy in recording messages/ information 1.3. Basic communication skills 1.4. Active-listening Skills 1.5. Note-taking skills 1.6. Clarifying and probing questions (questioning skills)
2. Perform workplace duties following written notices	2.1 Written notices and instructions are read and interpreted correctly in accordance with organizational guidelines 2.2 Routine written instructions are followed in sequence 2.3 Feedback is given to workplace supervisor based on the instructions/ information received	2.1 Organizational guidelines in regard to processing internal/ external information 2.2 Ethical work practices in handling communications 2.3 Overview of the Communication process 2.4 Effective questioning techniques (clarifying and probing)	2.1 Conciseness in receiving and clarifying messages/ information/ communication 2.2 Accuracy in recording messages/ information 2.3 Clarifying and probing questions (Questioning Skills) 2.4 Skills in reading and recording and labeling data 2.5 Skills in locating information

RANGE OF VARIABLES

VARIABLE	RANGE
1. Written notices and instructions	May include: 1.1. Written work instructions 1.2. Internal memos/memorandum 1.3. Business letters 1.4. External communications 1.5. Electronic mail 1.6. Briefing notes 1.7. General correspondence 1.8. Marketing materials 1.9. Guidelines/Circulars
2. Organizational guidelines	May include: 2.1. Information documentation procedures 2.2. Company guidelines and procedures 2.3. Standard Operating Procedure (SOPs) 2.4. Organization manuals 2.5. Departmental Policies and Procedures Manual 2.6. Service manual

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1. Demonstrated knowledge and understanding of organizational procedures in handling verbal and written communications 1.2. Received and acted on verbal messages and instructions correctly and efficiently 1.3. Demonstrated ability in recording instructions/information 1.4. Utilized effective clarifying and probing techniques where necessary
2. Resource Implications	The following resources should be provided: 2.1. Pens 2.2. Note pads 2.3. Computer (if applicable)
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Demonstration on communication skills (e. g., role-playing) 3.2. Oral questioning/Interview 3.3. Written Test
4. Context for Assessment	4.1. Competency may be assessed individually in the actual workplace or in a simulated environment in TESDA-accredited institutions

UNIT OF COMPETENCY : **WORK WITH OTHERS**
UNIT CODE : **400311102**
UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required in working as member of a team, interacting with co-members and performing one’s role in the team.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Develop effective workplace relationships	1.1. Duties and responsibilities are done in a positive manner to promote cooperation and good relationship 1.2. Assistance is sought from workgroup when difficulties arise and addressed through discussions 1.3. Feedback provided by others in the team is encouraged, acknowledged and acted upon 1.4. Differences in personal values and beliefs are respected and acknowledged during interaction	1.1. One’s role, duties and responsibilities in the workplace 1.2. Acknowledging/ receiving and giving feedback 1.3. Valuing respect and empathy in the workplace 1.4. Workplace communication protocols 1.5. Teamwork 1.6. Collaboration and teambuilding within the enterprise	1.1. Communication skills – oral and written (e. g., requesting advice, receiving feedback) 1.2. Ability to relate to/interact with people from a range of social and cultural backgrounds
2. Contribute to work group activities	2.1. Support is provided to team members to ensure workgroup goals are met 2.2. Constructive contributions to workgroup goals and tasks are made according to organizational requirements 2.3. Information relevant to work is shared with team members to ensure designated goals are met	2.1. Importance of creative collaboration, social perceptiveness and problem sensitivity in the workplace 2.2. Organizational Requirements 2.3. Importance of initiative and dedication in group process 2.4. Office and workplace technologies and automation (hardware, software systems)	2.1. Communication skills – oral and written (e. g., requesting advice, receiving feedback) 2.2. Organizing work priorities and arrangements 2.3. Team player skills 2.4. Technology skills including the ability to select and use technology appropriate to a task

RANGE OF VARIABLES

VARIABLE	RANGE
1. Duties and responsibilities	May include: <ul style="list-style-type: none"> 1.1 Job description and employment arrangements 1.2 Organization's policy relevant to work role 1.3 Organizational structures 1.4 Supervision and accountability requirements including OHS 1.5 Enterprise code of conduct
2. Work group	May include: <ul style="list-style-type: none"> 2.1 Supervisor or manager 2.2 Peers/work colleagues and clients 2.3 Other members of the organization
3. Feedback	May include: <ul style="list-style-type: none"> 3.1 Formal/Informal performance appraisal 3.2 Obtaining feedback from supervisors and colleagues and clients 3.3 Personal, reflective behavior strategies 3.4 Routine organizational methods for monitoring service delivery
4. Providing support to team members	May include: <ul style="list-style-type: none"> 4.1 Explaining/clarifying 4.2 Helping colleagues 4.3 Providing encouragement 4.4 Providing feedback to another team member 4.5 Undertaking extra tasks if necessary
5. Organizational requirements	May include: <ul style="list-style-type: none"> 5.1 Goals, objectives, plans, system and processes 5.2 Legal and organization policy/guidelines 5.3 OHS policies, procedures and programs 5.4 Ethical standards 5.5 Defined resources parameters 5.6 Quality and continuous improvement processes and standards

EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Provided support to team members to ensure goals are met 1.2. Acted on feedback from clients and colleagues 1.3. Demonstrated quality/active participation in team meetings and activities
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2. Materials relevant to the proposed activity or task
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written Test 3.2 Role play 3.3 Interview/Oral questioning 3.4 Structured and unstructured activity
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1. Competency assessment may occur in workplace or any appropriately simulated environment 4.2. Assessment shall be observed while task are being undertaken whether individually or in group

UNIT OF COMPETENCY : **SOLVE/ADDRESS ROUTINE PROBLEMS**
UNIT CODE : **400311103**
UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to solve problems in the workplace including the application of problem solving techniques and to determine and resolve the root cause of routine problems.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify the problem	1.1. Desired operating/output parameters and expected quality of products/services are identified. 1.2. The nature of the problem by observation on routines are defined. 1.3. Problems are stated and specified clearly.	1.1. Competence includes mastery of knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 1.2. Competence to include the ability to apply and explain fundamental causes of problems routine problems and to determine the corrective actions. 1.3. Relevant equipment and operational processes 1.4. Enterprise goals, targets and measures 1.5. Enterprise quality OHS and environmental requirement 1.6. Enterprise information systems and data collation 1.7. Industry codes and standards	1.1. Using range of formal problem-solving techniques (e.g., planning, attention, simultaneous and successive processing of information). 1.2. Identifying and clarifying the nature of the problem.
2. Assess fundamental causes of the problem	2.1. Problem-solving tool appropriate to the problem and the context is selected 2.2. Possible causes based on experience and the use of problem-solving tools/ basic analytical techniques are identified 2.3. Possible fundamental causes of problems are specified.	2.1 Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 2.2 Competence to include the ability to apply and explain fundamental causes of problems routine problems and to determine the corrective actions. 2.3 Relevant equipment and operational processes 2.4 Enterprise goals, targets and measures 2.5 Enterprise quality OHS	2.1 Using range of formal problem-solving techniques (e.g., planning, attention, simultaneous and successive processing of information). 2.2 Identifying extent and causes of procedural problems.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		and environmental requirement 2.6 Enterprise information systems and data collation 2.7 Industry codes and standards	
3. Determine corrective action	3.1. All possible options are considered for resolution of the routine problem. 3.2. Corrective actions are determined to resolve the problem and possible future causes 3.3. Action plans are developed identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures	3.1. Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 3.2. Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations 3.3. Relevant equipment and operational processes 3.4. Enterprise goals, targets and measures 3.5. Enterprise quality OHS and environmental requirement 3.6. Principles of decision making strategies and techniques 3.7. Enterprise information systems and data collation 3.8. Industry codes and standards	3.1. Using range of formal problem-solving techniques. 3.2. Identifying and clarifying the nature of the problem. 3.3. Devising and applying the best possible solution to a problem. 3.4. Evaluating the solution
4. Communicate action plans and recommendations to routine problems	4.1. Report on recommendations are prepared 4.2. Recommendations are presented to appropriate person . 4.3. Recommendations are followed-up, if required	4.1. Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 4.2. Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations 4.3. Relevant equipment and operational processes	4.1. Using range of formal problem solving techniques 4.2. Identifying and clarifying the nature of the problem 4.3. Devising the best possible solution to a routine problem 4.4. Evaluating the solution 4.5. Developing action plans to resolving and

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		4.4. Enterprise goals, targets and measures 4.5. Enterprise quality, OHS and environmental requirement 4.6. Principles of decision making strategies and techniques 4.7. Enterprise information systems and data collation 4.8. Industry codes and standards	managing routine problems.

RANGE OF VARIABLES

VARIABLES	RANGE
1. Problem	May include: <ul style="list-style-type: none"> 1.1. Routine/non – routine processes and quality problems 1.2. Equipment selection, availability and failure 1.3. Teamwork and work allocation problem 1.4. Safety and emergency situations and incidents
2. Basic analytical techniques	May include: <ul style="list-style-type: none"> 2.1. Brainstorming 2.2. Case Analysis 2.3. Cause and effect diagrams 2.4. Pareto analysis 2.5. SWOT analysis 2.6. Gant chart, Pert CPM and graphs 2.7. Scattergrams
3. Action plans	May include: <ul style="list-style-type: none"> 3.1. Priority requirements 3.2. Measurable objectives 3.3. Resource requirements 3.4. Timelines 3.5. Co-ordination and feedback requirements 3.6. Safety requirements 3.7. Risk assessment 3.8. Environmental requirements
4. Appropriate person	May include: <ul style="list-style-type: none"> 4.1 Supervisor or manager 4.2 Peers/work colleagues 4.3 Other members of the organization

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Identified the problem. 1.2. Determined the fundamental causes of the problem. 1.3. Determined the correct / preventive action. 1.4. Developed action plans in managing routine problems. <p>These aspects may be best assessed using project-based learning mode of assessment and case formulation.</p>
<p>2. Resource Implications</p>	<p>Assessment will require access to a workplace over an extended period, or a suitable method of gathering evidence of operating ability over a range of situations.</p>
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Case Formulation 3.2. Life Narrative Inquiry (Interview) 3.3. Standardized test <p>The unit will be assessed in a holistic manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations, which will include disruptions to normal, smooth operation. Simulation may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual workplace and will include walk through of the relevant competency components.</p> <p>These assessment activities should include a range of problems, including new, unusual and improbable situations that may have happened.</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions</p>

UNIT OF COMPETENCY : **ENHANCE SELF-MANAGEMENT SKILLS**
UNIT CODE : **400311104**
UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in applying the ability to regulate actions, make good decisions, and show appropriate behavior based on self-awareness.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Set personal and career goals	1.1. The difference between personal and career goals are described 1.2. Clear and concise personal and career goals are developed 1.3. Characteristics of motivational goals according to Locke & Latham are identified	1.1. Definition of personal goals and career goals 1.2. SMART Model for goal setting 1.3. Five principle of goal setting according to Locke & Latham (Clarity, Challenge, Commitment, Feedback, and Task complexity)	1.1. Setting of personal and career goals 1.2. Defining, creating, and mapping personal and career goals using SMART Model for goal setting 1.3. Applying goal setting principles to personal and career goals
2. Recognize emotions	2.1. Influence that people, situations and events have on emotions are described 2.2. Importance of responding with appropriate emotions are explained 2.3. Influences on and consequences of emotional responses in a social and work-related contexts are examined	2.1. Common positive and negative emotions manifested in the workplace 2.2. Professional and non-professional behaviors in the workplace 2.3. Triggers and implications of positive and negative emotions in the workplace	2.1. Identifying sensitively the positive and negative emotions in the workplace 2.2. Responding with appropriate emotions in the workplace 2.3. Identifying possible consequences of inappropriate emotional responses in a social and work-related context
3. Describe oneself as a learner	3.1. Factors and strategies that assist learning are identified and described 3.2. Preferred learning styles according to VAK Learning Style Model and Kolb's Theory of Learning Styles are identified 3.3. Range of learning strategies appropriate to specific tasks and describe work practices that assist their learning are identified and chosen	3.1. Kolb's Theory of Learning Styles (Converger, Diverger, Assimilator, Accommodator) 3.2. VAK Learning Style Model (Visual, Auditory, Kinesthetic) 3.3. Range of learning strategies appropriate to specific tasks and describe work practices that assist their learning	3.1. Identifying factors and strategies that assist learning 3.2. Applying learning styles to positively influence school/work performance 3.3. Using appropriate learning strategies to improve study habits and learning

RANGE OF VARIABLES

VARIABLE	RANGE
1. Personal goals	May include: <ul style="list-style-type: none"> 1.1. Graduate from Tech-Voc training 1.2. Buy a car 1.3. Travel around the world
2. Career goals	May include but not limited to: <ul style="list-style-type: none"> 2.1. Graduate from Tech-Voc training 2.2. Graduate from college 2.3. Buy a car 2.4. Retire at 50 years old
3. Emotions	Positive emotions may include: <ul style="list-style-type: none"> 3.1. Joy 3.2. Gratitude 3.3. Hope 3.4. Serenity Negative emotions may include: <ul style="list-style-type: none"> 3.5. Anger 3.6. Fear 3.7. Disgust 3.8. Sadness
4. Social and work-related contexts	May include professional behavior such as: <ul style="list-style-type: none"> 4.1. Committed to developing and improving their skills 4.2. Professionals get the job done 4.3. They keep their word and deliver what they promise. May include non-professional behavior such as– <ul style="list-style-type: none"> 4.4. They engage in office politics 4.5. Bluffing and misrepresenting their skills 4.6. Blaming a colleague
5. Learning styles	May include: <ul style="list-style-type: none"> 5.1. Visual 5.2. Auditory 5.3. Kinesthetic 5.4. Converger 5.5. Diverger 5.6. Assimilator 5.7. Accommodator
6. Learning strategies	May include: <ul style="list-style-type: none"> 6.1. Explain and describe ideas with many details 6.2. Switch between ideas while studying 6.3. Use specific examples to understand abstract ideas

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Developed SMART personal and career goals 1.2. Applied goal setting principles 1.3. Identified sensitively the positive and negative emotions in the workplace 1.4. Responded with appropriate emotions in the workplace 1.5. Identified possible consequences of inappropriate emotional responses in a social and work-related context 1.6. Applied learning styles to positively influence school/work performance 1.7. Developed reflective practice through realization of limitations, likes/ dislikes; through showing of self-confidence
<p>2. Resource Implications</p>	<p>The following resources for should be provided:</p> <ul style="list-style-type: none"> 2.1. Access to workplace and resources
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Demonstration or simulation with oral questioning (ex. how to recognize emotions) 3.2. Case problems involving workplace diversity issues 3.3. Third-party report
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1. Competency assessment may occur in workplace or any appropriately simulated environment

UNIT OF COMPETENCY : **SUPPORT INNOVATION**
UNIT CODE : **400311105**
UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to identify, recognize and support innovation.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify the need for innovation in one's area of work	1.1. The value of innovative practices in the workplace is recognized 1.2. Creativity in innovation in one's scope of work is applied 1.3. The need for innovation in own scope of work is recognized	1.1. Clear-cut definition of innovation 1.2. Current practice in own scope of work 1.3. Workplace procedures	1.1. Contributing in brainstorming session 1.2. Examining current practice in one's scope of work 1.3. Identifying issues and concerns of one's scope of work
2. Recognize innovative and creative ideas	2.1. Opportunities within the team are identified to develop innovation 2.2. Creative ideas of coworkers pertaining to work practices are analyzed 2.3. Environment conducive for learning and innovating is maintained	2.1. Support required to generate creative ideas 2.2. Difference between innovation and creativity 2.3. Innovative climate in one's scope of work	2.1. Identifying resources required for creativity and innovation 2.2. Examining potential obstacles to and opportunities for creativity and innovation 2.3. Communicating creative ideas of co-workers
3. Support individuals' access to flexible and innovative ways of working	3.1. Individuals and key people are reinforced to identify innovative ideas to achieve outcomes 3.2. Sharing of best practices using flexible and innovative ways of working is accomplished 3.3. Obstacles to progress in implementing flexible and innovative ways of working are recognized	3.1. The role of employees/workers in the improvement of practices in the organization 3.2. Best practices using flexible and innovative ways of working 3.3. Obstacles in implementing innovation in one's scope of work	3.1. Encouraging co-workers to generate and develop ideas 3.2. Evaluating potential obstacles to and opportunities for creativity and innovation 3.3. Sharing of best practices related to innovation and creativity

RANGE OF VARIABLES

VARIABLE	RANGE
1. Innovative practices	May include: 1.1 Self-directed support 1.2 Community based services 1.3 Working within a collaborative arrangement 1.4 Making scope of work more efficient
2. Innovation	May include: 2.1 New ideas 2.2 Original ideas 2.3 Different ideas 2.4 Methods or tools

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Identified need for innovation in the area of work 1.2. Recognized innovative and creative ideas 1.3. Pursued agreement for flexible and innovative ways of working 1.4. Supported individuals and people to access flexible and innovative ways of working
<p>2. Resource Implications</p>	<p>Specific resources for assessment</p> <ul style="list-style-type: none"> 2.1. Evidence of competent performance should be obtained by observing an individual in an information management role within the workplace or operational or simulated environment.
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Written Test 3.2. Interview <p>The unit will be assessed in a holistic manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations, which will include disruptions to normal, smooth operation. Simulation may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual workplace and will include walk through of the relevant competency components.</p>
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1. Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions

UNIT OF COMPETENCY : **ACCESS AND MAINTAIN INFORMATION**
UNIT CODE : **400311106**
UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to identify, gather, interpret and maintain information.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify and gather needed information	1.1. Required information is identified based on requirements. 1.2. Sources to produce required information are identified and accessed 1.3. Report information is collected, organized and recorded 1.4. Organize information is collected in a way that enables easy access and retrieval by other staff	1.1. Policies, procedures and guidelines relating to information handling in the public and private sector, including confidentiality, privacy, security, freedom of information 1.2. Data collection and management procedures 1.3. Cultural aspects of information and meaning 1.4. Sources of public sector work-related information 1.5. Public/private sector standards	1.1. Handling policies, procedures and guidelines relating to information handling in the public sector, including confidentiality, privacy, security, freedom of information 1.2. Collecting data and managing procedures 1.3. Practicing cultural aspects of information and meaning 1.4. Using public/private sector standards
2. Search for information on the internet or an intranet	2.1. Engine is search to find and select appropriate information 2.2. Suitable techniques is use to make it easier to find useful information and to pass it on to others 2.3. Records are use where useful information came from 2.4. Results are used for searches of useful information 2.5. Search engine is chosen appropriate for the information that is needed 2.6. Searches are carry out as per requirements	2.1. Find and select appropriate information 2.2. Techniques in finding useful information Records are use where useful information came from 2.3. Search engines for information	2.1. Finding and selecting search engine to find and select appropriate information 2.2. Using suitable techniques to find useful information easier 2.3. Using records 2.4. Carrying out Searches

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Examine information	2.5. Information and its sources are evaluated for relevance and validity to business and/or client requirements. 2.6. Information is examined as required to identify key issues. 2.7. Detailed evaluation of information is carried out as required using relevant techniques including mathematical calculations.	3.1. Data evaluation procedures 3.2. Cultural aspects of information and meaning 3.3. Sources of public sector work-related information 3.4. Public sector standards	3.1. Evaluating data 3.2. Practicing cultural aspects of information and meaning 3.3. Using public sector standards
4. Secure information	4.1. Basic file-handling techniques are used for the software 4.2. Techniques is used to handle, organize and secure information	4.1. Policies, procedures and guidelines relating to information handling in the public sector, including confidentiality, privacy, security, freedom of information 4.2. Basic file-handling techniques 4.3. Techniques in handling, organizing and saving files 4.4. Electronic and manual filing systems	4.1. Handling policies, procedures and guidelines relating to information handling in the public sector, including confidentiality, privacy, security, freedom of information 4.2. Using basic file-handling techniques is used for the software 4.3. Using different techniques in handling, organizing and saving files 4.4. Using electronic and manual filing systems
5. Manage information	5.1. Information and records are maintained to ensure data and system integrity using a range of standard and complex information systems and operations. 5.2. Routine data and records are reconciled as required. 5.3. Inadequacies in system/s relating to information retrieval are identified and corrected or reported to relevant staff as required.	5.1. Policies, procedures and guidelines relating to information handling in the public sector, including confidentiality, privacy, security, freedom of information 5.2. Data collection and management procedures 5.3. Organizational information handling and storage procedures 5.4. Cultural aspects of information and meaning	5.1. Handling policies, procedures and guidelines relating to information handling in the public sector, including confidentiality, privacy, security, freedom of information 5.2. Collecting data and managing procedures 5.3. Handling organizational information and storage procedures 5.4. Practicing cultural

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		5.5. Sources of public sector work-related information 5.6. Public sector standards 5.7. Databases and data storage systems	aspects of information and meaning 5.5. Using public sector standards 5.6. Managing databases and data storage systems

RANGE OF VARIABLES

VARIABLE	RANGE
1. Information	May include: 1.1. Property 1.2. Organizational 1.3. Technical reference
2. Search engine	May include: 2.1. Crawler-based search engine 2.1.1. Google 2.1.2. AlltheWeb 2.1.3. AltaVista 2.2. Human-powered directories 2.2.1. Yahoo directory 2.2.2. Open directory 2.2.3. Looksmart
3. Sources	May include: 3.1. Other IT systems 3.2. Manually created 3.3. Within own organization 3.4. Outside own organization 3.5. Geographically remote

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Identified and gathered needed information 1.2 Searched for information on the internet or an intranet 1.3 Studied and interpreted information 1.4 Handled files 1.5 Maintained information
<p>2. Resource Implications</p>	<p>Specific resources for assessment</p> <ul style="list-style-type: none"> 2.1. Evidence of competent performance should be obtained by observing an individual in an information management role within the workplace or operational or simulated environment.
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Written Test 3.2. Interview 3.3. Portfolio <p>The unit will be assessed in a holistic manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations, which will include disruptions to normal, smooth operation. Simulation may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual workplace and will include walk through of the relevant competency components.</p>
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.

UNIT OF COMPETENCY : FOLLOW OCCUPATIONAL SAFETY AND HEALTH POLICIES AND PROCEDURES

UNIT CODE : 400311107

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes to identify relevant occupational safety and health policies and procedures, perform relevant occupational safety and health procedures, and comply with relevant occupational safety and health policies and standards

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify relevant occupational safety and health policies and procedures	1.1 Related occupational safety and health risks and hazards are recognized based on OSH work standards 1.2 OSH requirements/regulations towards work are determined in accordance to workplace policies and procedures 1.3 Incident/ Emergency procedures relevant to workplace are identified based on relevant OSH work standards	1.1. Occupational safety and health risks and hazards 1.2. OSH work standards 1.3. Government approved Occupational Safety and Health Policies and regulations 1.4. Terms related to occupational safety and health 1.5. Workplace process and procedures 1.6. Standard emergency plan and procedures	1.1 Observation skills 1.2 Critical thinking skills 1.3 Communication skills
2. Perform relevant occupational safety and health procedures	2.1 Safety devices are checked in accordance with workplace OSH work standards 2.2 OSH Work instructions are followed in accordance with workplace policies and procedures* 2.3 Personal protective equipment , materials, tools, machinery, and equipment are utilized according to OSH work standards	2.1 OSH Work instructions Personal protective equipment 2.2 Safe handling procedures of tools, equipment and materials 2.3 Standard emergency plan and procedures 2.4 Different OSH control measures 2.5 Standard accident and illness reporting procedures	2.1 Communication skills 2.2 Knowledge management 2.3 Organizing skills 2.4 Observation skills
3. Comply with relevant occupational safety and health policies and standards	3.1 Preventive Control Measures are identified in accordance with OSH work standards 3.2 OSH requirements are obeyed in accordance with workplace policies and procedures 3.3 Incident/ Emergency procedures are executed based on OSH Procedures	3.1 OSH Preventive Control Measures 3.2 Principles of 5S 3.3 Environmental requirements relative to industrial wastes disposal 3.4 OSH requirements relative to safe handling and disposal of materials 3.5 Personal hygiene practices	3.1 Communication skills 3.2 Knowledge management 3.3 Organizing skills 3.4 Critical thinking skills 3.5 Observation skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Occupational Safety and Health Risks and Hazards	<p>May include:</p> <ul style="list-style-type: none"> 1.1 Physical hazards – impact, illumination, pressure, noise, vibration, extreme temperature, radiation 1.2 Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects 1.3 Chemical hazards – dusts, fibers, mists, fumes, smoke, gasses, vapors 1.4 Ergonomics 1.5 Psychological factors – over exertion/ excessive force, awkward/static positions, fatigue, direct pressure, varying metabolic cycles 1.6 Physiological factors – monotony, personal relationship, work out cycle 1.7 Safety hazards (unsafe workplace condition) – confined space, excavations, falling objects, gas leaks, electrical, poor storage of materials and waste, spillage, waste and debris 1.8 Unsafe workers' act (Smoking in off-limited areas, Substance and alcohol abuse at work)
2. OSH Work Standards	<p>May include:</p> <ul style="list-style-type: none"> 2.1 OSHS Rule 1090 Hazardous Materials 2.2 OSHS Rule Gas & Electric Welding and Cutting Operations 2.3 OSHS Rule 1120 Hazardous Work Processes 2.4 OSHS Rule 1150 Materials Handling & Storage 2.5 OSHS Rule 1180 Internal Combustion Engine 2.6 OSHS Rule 1210 Electrical Safety 2.7 OSHS Rule 1420 Logging 2.8 OSHS Rule 1410 Construction Safety 2.9 OSHS Rule 1950 Pesticides & Fertilizers
3. OSH Requirements/ Regulations	<p>May include:</p> <ul style="list-style-type: none"> 3.1 Clean Air Act 3.2 Building code 3.3 National Electrical and Fire Safety Codes 3.4 Waste management statutes and rules 3.5 Permit to Operate 3.6 Philippine Occupational Safety and Health Standards 3.7 Department Order No. 13 (Construction Safety and Health) 3.8 ECC regulations 3.9 Republic Act No. 11058 – An Strengthening Compliance with Occupational Safety and Health
4. Incident and Emergency Procedures	<p>May include:</p> <ul style="list-style-type: none"> 4.1 Chemical spills 4.2 Equipment/vehicle accidents 4.3 Explosion

VARIABLE	RANGE
	4.4 Fire Drill 4.5 Gas leak 4.6 Injury to personnel 4.7 Structural collapse 4.8 Earthquake drill 4.9 Toxic and/or flammable vapors emission 4.10 Evacuation 4.11 Isolation 4.12 Basic life support/CPR 4.13 Decontamination 4.14 Calling designed emergency personnel
5. OSH Work Instructions	May include: 5.1 Worker's Participation Policies 5.2 Company Environment Safety and Health Policies 5.3 Continual OSH Improvement Instructions 5.4 Education and Training 5.5 Safety and Health Policy Statements 5.6 Mission and Vision Statements 5.7 Operating Instructions and Policies
6. Personal Protective Equipment	May include: 6.1 Arm/Hand guard, gloves 6.2 Eye protection (goggles, shield) 6.3 Hearing protection (ear muffs, ear plugs) 6.4 Hair Net/cap/bonnet 6.5 Hard hat 6.6 Face protection (mask, shield) 6.7 Apron/Gown/coverall/jump suit 6.8 Anti-static suits 6.9 High-visibility reflective vest
7. Preventive Control Measures	May include: 7.1 Eliminate the hazard (i.e., get rid of the dangerous machine) 7.2 Isolate the hazard (i.e. keep the machine in a closed room and operate it remotely; barricade an unsafe area off) 7.3 Substitute the hazard with a safer alternative (i.e., replace the machine with a safer one) 7.4 Use administrative controls to reduce the risk (i.e. give trainings on how to use equipment safely; OSH-related topics, issue warning signages, rotation/shifting work schedule) 7.5 Use engineering controls to reduce the risk (i.e. use safety guards to machine) 7.6 Use personal protective equipment 7.7 Safety, Health and Work Environment Evaluation 7.8 Periodic and/or special medical examinations of workers

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Recognize related occupational safety and health risks and hazards based on OSH work standards 1.2. Identify incident/emergency procedures relevant to workplace based on relevant OSH work standards 1.3. Follow the OSH work instructions in accordance with workplace policies and procedures 1.4. Utilize personal protective equipment, materials, tools, machinery, and equipment according to OSH work standards 1.5. Obey OSH requirements in accordance with workplace policies and procedures 1.6. Executed incident/ emergency procedures based on OSH Procedures
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Facilities, materials tools and equipment necessary for the activity
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Observation/Demonstration with oral questioning 3.2 Third party report
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY : **APPLY ENVIRONMENTAL WORK STANDARDS**
UNIT CODE : **400311108**
UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude to identify environmental work hazards, follow environment work procedures and comply with environmental requirements.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify environmental work hazards	1.1. Related environmental hazards are recognized based on environmental work standards 1.2. Environmental work standards are interpreted in accordance to relevant policies 1.3. Required resources to minimize effect of environmental hazards are prepared based on relevant environmental work standards	1.1. Environmental Hazards 1.2. Environmental Work Standards 1.3. Required Resources 1.4. OSH Standards 1.5. Fight against poverty rights 1.6. Environmental Protection 1.7. Respect of Human Rights	1.1. Critical thinking 1.2. Problem solving 1.3. Observation Skills
2. Follow environmental work procedures	2.1. Environmental protection pre-cautionary activities are practiced based on environmental work procedures 2.2. Work activities are executed in accordance with Environmental work Procedures 2.3. Environmental Protection Post-Activities are accomplished based on environmental work procedures*	2.1. Environmental Protection 2.2. Environmental Work Procedures 2.3. Renewable Energies	2.1. Critical thinking 2.2. Problem solving 2.3. Observation Skills
3. Comply with environmental work requirements	3.1. Required resources are utilized in accordance with workplace environmental policies 3.2. Environmental hazardous and non-hazardous materials are stored in accordance with environmental regulations 3.3. Hazardous and Non-hazardous Wastes disposed according to environmental regulations	3.1. Environmental Work Procedures 3.2. Environmental Laws 3.3. Environmental Hazardous and Non-Hazardous Materials	3.1. Critical thinking 3.2. Problem solving 3.3. Observation Skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Environmental Hazards	May include: <ul style="list-style-type: none"> 1.1 Tobacco Smoke 1.2 Asbestos 1.3 Lead 1.4 Combustion Gases 1.5 Chemicals 1.6 Pesticides 1.7 Pollutants 1.8 Contaminated Drinking Water 1.9 Noise 1.10 Dust
2. Environmental Work Standards	May include: <ul style="list-style-type: none"> 2.1 Air Quality Standards 2.2 Emission Standards 2.3 ISO 14001: Environmental Management System 2.4 Environmental Statements 2.5 Environmental Quality Standards 2.6 Work Environment Measurement Standard
3. Required Resources	May include: <ul style="list-style-type: none"> 3.1 Electric 3.2 Water 3.3 Fuel 3.4 Telecommunications 3.5 Supplies and Materials 3.6 Trash Cans 3.7 Relevant Data Sheets 3.8 Barriers or Barricades
4. Environmental Protection	May include protection against <ul style="list-style-type: none"> 4.1 Overconsumption of Resources 4.2 Destruction of Ecosystems 4.3 Habitat Destructions 4.4 Extinction of Wildlife 4.5 Pollutions 4.6 Water Degradation
5. Environmental Work Procedures	May include: <ul style="list-style-type: none"> 5.1 Environmental pollution control measures 5.2 Oil and Fuel use 5.3 Disposal and Reuse 5.4 Herbicide applications 5.5 Breed Bird Mitigation 5.6 Tree Removal Works 5.7 Erosion Protection 5.8 Scrub Clearance 5.9 Bankside sediment clearance

VARIABLE	RANGE
6. Environmental Hazardous and Non-Hazardous Materials	May include but not limited: <ul style="list-style-type: none"> 6.1 Acids 6.2 Adhesives 6.3 Aerosols 6.4 Asbestos 6.5 Batteries 6.6 Chemicals 6.7 Compact fluorescent lamps 6.8 Drugs 6.9 Dyes 6.10 E-Waste 6.11 Gasoline 6.12 Grease 6.13 Lead 6.14 Motor Oil 6.15 Solvents 6.16 Weed Killers
7. Environmental Regulations	May include: <ul style="list-style-type: none"> 7.1 Clean Air Act 7.2 Clean Water Act 7.3 Endangered Species Act 7.4 Resource Conservation and Recovery Act 7.5 Cave Resources and Management Act 7.6 Fisheries Code 7.7 Forestry Code 7.8 Mining Act

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Interpreted the Environmental Work Standards in accordance to relevant policies 1.2. Prepared required resources to minimize effects of environmental hazards based on relevant environmental work standards 1.3. Practiced environmental protection pre-cautionary activities based on environmental work procedures 1.4. Executed work activities in accordance with environmental work procedures 1.5. Accomplished environmental protection post-activities based on environmental work procedures 1.6. Stored environmental hazardous and non-hazardous materials in accordance with environmental regulations 1.7. Disposed hazardous and non-hazardous wastes according to environmental regulations
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Workplace with storage facilities 2.2. Tools, materials and equipment relevant to the tasks (ex. Cleaning tools, cleaning materials, trash bags, etc.) 2.3. PPE 2.4. Manuals and references
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Demonstration 3.2. Oral questioning 3.3. Written examination
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1. Competency assessment may occur in workplace or any appropriately simulated environment 4.2. Assessment shall be observed while task are being undertaken whether individually or in-group

UNIT OF COMPETENCY : ADOPT ENTREPRENEURIAL MINDSET IN THE WORKPLACE

UNIT CODE : 400311109

UNIT DESCRIPTOR : This unit covers the outcomes required to support and internalize an entrepreneurial mindset and observe basic entrepreneurial practices in the workplace.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Determine entrepreneurial mindset	1.1. Entrepreneurial mindset in the workplace is determined from enterprise practices and policies. 1.2. Entrepreneurial mindset in the workplace is studied and affirmed based on current enterprise practices 1.3. Clarification from reliable sources is sought regarding entrepreneurial mindset and corporate culture.	1.1. Workplace policies and practices relating to entrepreneurship 1.2. Elements of corporate culture 1.3. Entrepreneurial mindset 1.4. Entrepreneurial practices in the workplace 1.5. Desirable attitudes: <ul style="list-style-type: none"> • Patience • Willingness to learn • Attention to details 	1.1. Identifying entrepreneurial mindset 1.2. Studying and affirming entrepreneurial mindset 1.3. Selecting and emulating desirable entrepreneurial practices 1.4. Communication skills
2. Identify entrepreneurial practices	2.1. Entrepreneurial practices are determined based on enterprise requirements 2.2. Entrepreneurial practices are performed following workplace and client requirements. 2.3. Cost-effective measures are complied with reference to workplace best practices	2.1. Quality assurance practices 2.2. Workplace and client requirements 2.3. Types of cost-effective measures 2.4. Workplace quality policy 2.5. Attitude: <ul style="list-style-type: none"> • Patience • Attention to details 	2.1. Performing quality assurance practices 2.2. Complying quality assurance requirements 2.3. Complying to cost-effective measures 2.4. Communication skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Entrepreneurial mindset	<p>May include workplace thinking relating to:</p> <ul style="list-style-type: none"> 1.1. Economy in the use of resources 1.2. Waste management 1.3. Quality-consciousness 1.4. Cost-consciousness 1.5. Safety- and health- consciousness
2. Quality assurance practices	<p>May include:</p> <ul style="list-style-type: none"> 2.1. Use of quality procedures manual 2.2. Quality policy 2.3. Best/Good practices 2.4. Continuous improvement program
3. Reliable sources	<p>May include:</p> <ul style="list-style-type: none"> 3.1. Supervisors 3.2. Colleagues 3.3. Clients/Partners

EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Demonstrated affirmation of entrepreneurial mindset 1.2 Observed entrepreneurial practices 1.3 Complied with cost effective measures
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Simulated or actual workplace 2.2 Tools, materials and supplies needed to demonstrate the required tasks 2.3 References and manuals
3. Methods of Assessment	<p>Competency in this unit may be assessed through :</p> <ul style="list-style-type: none"> 3.1 Written examination 3.2 Demonstration/observation with oral questioning 3.3 Third-party report
4. Context of Assessment	<ul style="list-style-type: none"> 4.1 Competency may be assessed in workplace or in a simulated workplace setting 4.2 Assessment shall be observed while tasks are being undertaken whether individually or in-group

COMMON COMPETENCIES

UNIT TITLE : **APPLY QUALITY STANDARDS**

UNIT CODE : **ICT315202**

UNIT DESCRIPTOR : This unit covers the knowledge, skills, attitudes and values needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Assess quality of received materials	1.1. Work instruction is obtained and work is carried out in accordance with standard operating procedures. 1.2. Received materials are checked against workplace standards and specifications. 1.3. Faulty materials related to work are identified and isolated. 1.4. Faults and any identified causes are recorded and/or reported to the supervisor concerned in accordance with workplace procedures. 1.5. Faulty materials are replaced in accordance with workplace procedures.	1.1. Relevant production processes, materials and products 1.2. Characteristics of materials, software and hardware used in production processes 1.3. Quality checking procedures 1.4. Quality Workplace procedures 1.5. Identification of faulty materials related to work	1.1. Reading skills required to interpret work instruction 1.2. Critical thinking 1.3. Interpreting work instructions
2. Assess own work	2.1 Documentation relative to quality within the company is identified and used. 2.2 Completed work is checked against workplace standards relevant to the task undertaken. 2.3 Errors are identified and isolated. 2.4 Information on the quality and other indicators of production performance are recorded in accordance with workplace procedures. 2.5 In cases of deviations from specific quality standards , causes are documented and reported in accordance with the workplace' s standards operating procedures.	2.1. Safety and environmental aspects of production processes 2.2. Fault identification and reporting 2.3. Workplace procedure in documenting completed work 2.4. Workplace Quality Indicators	2.1. Carry out work in accordance with OHS policies and procedures

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Engage in quality improvement	3.1 Process improvement procedures are participated in relative to workplace assignment. 3.2 Work is carried out in accordance with process improvement procedures. 3.3 Performance of operation or quality of product of service to ensure customer satisfaction is monitored.	3.1. Quality improvement processes 3.2. Company customers defined	3.1. Solution providing and decision-making 3.2. Practice company process improvement procedure

RANGE OF VARIABLES

VARIABLE	RANGE
1 Materials	1.1 Materials may include but not limited to: 1.1.1. Manuals 1.1.2. Job orders 1.1.3. Instructional videos
2 Faults	2.1 Faults may include but not limited to: 2.1.1. Materials not to specification 2.1.2. Materials contain incorrect/outdated information 2.1.3. Hardware defects 2.1.4. Materials that do not conform with any regulatory agencies
3 Documentation	3.1 Organization work procedures 3.2 Manufacturer's instruction manual 3.3 Customer requirements 3.4 Forms
4 Errors	4.1 Errors may be related but not limited to the following: 4.1.1. Deviation from the requirements of the Client 4.1.2. Deviation from the requirement of the organization
5 Quality standards	5.1 Quality standards may be related but not limited to the following: 5.1.1. Materials 5.1.2. Hardware 5.1.3. Final product 5.1.4. Production processes 5.1.5. Customer service
6 Customer	6.1 Co-worker 6.2 Supplier/Vendor 6.3 Client 6.4 Organization receiving the product or service

EVIDENCE GUIDE

1 Critical aspect of competency	Assessment requires evidence that candidate: 1.1 Carried out work in accordance with the company's standard operating procedures 1.2 Performed task according to specifications 1.3 Reported defects detected in accordance with standard operating procedures 1.4 Carried out work in accordance with the process improvement procedures
2 Method of assessment	The assessor may select two (2) of the following assessment methods to objectively assess the candidate: 2.1 Observation 2.2 Questioning 2.3 Practical demonstration
3 Resource implication	3.1 Materials, software and hardware to be used in a real or simulated situation
4 Context of Assessment	4.1 Assessment may be conducted in the workplace or in a simulated environment

UNIT TITLE : PERFORM COMPUTER OPERATIONS

UNIT CODE : ICT311203

UNIT DESCRIPTOR : This unit covers the knowledge, skills, (and) attitudes and values needed to perform computer operations which include inputting, accessing, producing and transferring data using the appropriate hardware and software

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Plan and prepare for task to be undertaken	1.1. Requirements of task are determined 1.2. Appropriate hardware and software are selected according to task assigned and required outcome 1.3. Task is planned to ensure OH&S guidelines and procedures are followed	1.1. Main types of computers and basic features of different operating systems 1.2. Main parts of a computer 1.3. Information on hardware and software 1.4. Data security guidelines	1.1. Reading and comprehension skills required to interpret work instruction and to interpret basic user manuals. 1.2. Communication skills to identify lines of communication, request advice, follow instructions and receive feedback. 1.3. Interpreting user manuals and security guidelines
2. Input data into computer	2.1. Data are entered into the computer using appropriate program/application in accordance with company procedures 2.2. Accuracy of information is checked and information is saved in accordance with standard operating procedures 2.3. Inputted data are stored in storage media according to requirements 2.4. Work is performed within ergonomic guidelines	2.1. Basic ergonomics of keyboard and computer user 2.2. Storage devices and basic categories of memory 2.3. Relevant types of software	2.1. Technology skills to use equipment safely including keyboard skills. 2.2. Entering data
3. Access information using computer	3.1. Correct program/application is selected based on job requirements 3.2. Program/application containing the information required is accessed according to company procedures 3.3. Desktop icons are correctly selected, opened and closed for navigation purposes	3.1. General security, privacy legislation and copyright 3.2. Productivity Application 3.3. Business Application	3.1. Accessing information 3.2. Searching and browsing files and data

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	3.4. Keyboard techniques are carried out in line with OH&S requirements for safe use of keyboards		
4. Produce/output data using computer system	4.1. Entered data are processed using appropriate software commands 4.2. Data printed out as required using computer hardware/peripheral devices in accordance with standard operating procedures 4.3. Files, data are transferred between compatible systems using computer software, hardware/peripheral devices in accordance with standard operating procedures	4.1. Computer application in printing, scanning and sending facsimile 4.2. Types and function of computer peripheral devices	4.1. Computer data processing 4.2. Printing of data 4.3. Transferring files and data
5. Maintain computer equipment and systems	5.1. Systems for cleaning, minor <i>maintenance</i> and replacement of consumables are implemented 5.2. Procedures for ensuring security of data, including regular back-ups and virus checks are implemented in accordance with standard operating procedures 5.3. Basic file maintenance procedures are implemented in line with the standard operating procedures	5.1 Computer equipment/system basic maintenance procedures 5.2 Viruses 5.3 OH&S principles and responsibilities 5.4 Calculating computer capacity 5.5 System Software 5.6 Basic file maintenance procedures	5.1 Removing computer viruses from infected machines 5.2 Making backup files

RANGE OF VARIABLES

VARIABLE	RANGE
1. Hardware and peripheral devices	1.1. Personal computers 1.2. Networked systems 1.3. Communication equipment 1.4. Printers 1.5. Scanners 1.6. Keyboard 1.7. Mouse
2. Software	Software includes the following but not limited to: 2.1. Word processing packages 2.2. Data base packages 2.3. Internet 2.4. Spreadsheets
3. OH & S guidelines	3.1. OHS guidelines 3.2. Enterprise procedures
4. Storage media	Storage media include the following but not limited to: 4.1. diskettes 4.2. CDs 4.3. zip disks 4.4. hard disk drives, local and remote
5. Ergonomic guidelines	5.1. Types of equipment used 5.2. Appropriate furniture 5.3. Seating posture 5.4. Lifting posture 5.5. Visual display unit screen brightness
6. Desktop icons	Icons include the following but not limited to: 6.1. directories/folders 6.2. files 6.3. network devices 6.4. recycle bin
7. Maintenance	7.1. Creating more space in the hard disk 7.2. Reviewing programs 7.3. Deleting unwanted files 7.4. Backing up files 7.5. Checking hard drive for errors 7.6. Using up to date security solution programs 7.7. Cleaning dust from internal and external surfaces

EVIDENCE GUIDE

1. Critical aspect of competency	
2. Method of assessment	
3. Resource implication	3.1. Computer hardware with peripherals 3.2. Appropriate software
4. Context of Assessment	4.1. Assessment may be conducted in the workplace or in a simulated work environment

CORE COMPETENCIES

UNIT OF COMPETENCY : PROVIDE APPROPRIATE RESPONSE TO AN EVENT/
INCIDENT

UNIT CODE : CS-ICT25205

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to provide an appropriate response to an event/incident. This includes competencies in checking flagged names and status of third party security solution, performing manual checking and verification and conducting case follow-up.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Check for flagged names	1.1. Incident report is received as per company Standard Operating Procedure (SOP). 1.2. Red flag detection is checked according company SOP 1.3. Ticket is issued upon confirmation of detection.	1.1. Sources of incident reports 1.2. Log and detection management 1.3. security solution scan and operations procedure 1.4. Security solution management application 1.5. Security solution severity classifications 1.6. Malicious software behaviors	1.1. Computer operation skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Basic troubleshooting skills 1.5. Interpersonal skills 1.6. Data analysis skills
2. Check status of third party security solution	2.1. Security solution software is checked if there is one installed as per company SOP. 2.2. Security solution software is checked if operational as per company SOP. 2.3. Security solution software is checked if it can clean or delete the issue	2.1. Log and detection management 2.2. Security solution usage and operations	2.1. Computer operation skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Basic troubleshooting skills 2.5. Interpersonal skills 2.6. Data analysis skills
3. Perform manual checking and verification	3.1. Detection from the security solution software is checked as per procedure 3.2. Check action of the security solution software as per company SOP. 3.3. Security solution software updates are checked and patched as required 3.4. Security solution software is used to scan infected system/s	3.1. Log and detection management 3.2. Security solution scan and operations procedure	3.1. Computer operation skills 3.2. Communication skills 3.3. Interpreting work instructions 3.4. Basic troubleshooting skills 3.5. Interpersonal skills 3.6. Data analysis skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Conduct case follow-up	4.1. Results of the scan are verified to customer/ client/ stakeholder 4.2. Security solution scan logs are checked for failed action as per company SOP. 4.3. Failed action is escalated to <i>appropriate authority</i> as per company SOP.	4.1. Log and detection management	4.1. Computer operation skills 4.2. Communication skills 4.3. Interpreting work instructions 4.4. Basic troubleshooting skills 4.5. Interpersonal skills 4.6. Data analysis skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Incident report	May include: 1.1. phone call 1.2. walk-in 1.3. email 1.4. SMS 1.5. Chat 1.6. Video-conferences
2. Red flag detection	May include: 2.1. ransomware 2.2. PE Infection /Virus
3. Security solution software	May include but not limited to the computer security software owned by the following companies (<i>not in any particular order</i>): 3.1. Kaspersky 3.2. McAfee 3.3. Microsoft 3.4. Symantec 3.5. Trend Micro
4. Security solution	May include: 4.1. Anti-virus 4.2. TDR 4.3. WAF 4.4. IDS 4.5. IPS 4.6. common firewall
5. Action	May include: 5.1. Failed 5.2. Clean 5.3. Delete 5.4. Quarantine
6. Appropriate authority	May include: 6.1. IT department 6.2. Information security department 6.3. Security solution/security vendor

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Checked for flagged names <ul style="list-style-type: none"> 1.1.1 Checked red flag detection according company SOP 1.1.2 Issued ticket issued upon confirmation of detection 1.2 Checked status of third party security solution <ul style="list-style-type: none"> 1.2.1 Checked security solution software if operational as per company SOP 1.2.2 Checked security solution software if it can clean or delete the issue 1.3 Performed manual checking and verification <ul style="list-style-type: none"> 1.3.1 Checked action of the security solution software as per company SOP 1.3.2 Checked and patched security solution software updates as required 1.3.3 Used security solution software to scan infected system/s 1.4 Conducted case follow-up <ul style="list-style-type: none"> 1.4.1 Verified results of the scan to customer/client/stakeholder 1.4.2 Checked security solution scan logs for failed action as per company SOP 1.4.3 Escalated failed action to appropriate authority as per company SOP
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Appropriate supplies and materials 2.2 Applicable equipment 2.3 Appropriate software 2.4 Workplace or assessment area
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Demonstration with oral questioning 3.2 Written Exam 3.3 Portfolio with interview
<p>4. Context for Assessment</p>	<p>4.1 Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p>

UNIT OF COMPETENCY : ENSURE EFFICIENT ESCALATION AND TICKETING
UNIT CODE : CS-ICT25206
UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to ensure efficient escalation and ticketing.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Create ticket	1.1. Alarm from the security solution software is received based on monitoring and/or the stakeholder's report for possible malicious software behavior 1.2. Ticket is created per incident detected based on monitoring and/or the stakeholder's report for possible malicious software behavior 1.3. Incident/s are identified based on security solution severity classification	1.1. Ticket management systems 1.2. Security solution management application 1.3. Security solution products 1.4. Security solution severity classifications 1.5. malicious software behavior	1.1. Computer operation skills 1.2. Communication skills 1.3. Interpreting work instructions 1.4. Basic troubleshooting skills 1.5. Interpersonal skills 1.6. Data analysis skills
2. Perform probing on stakeholder's reported incident/s	2.1. Data is gathered from stakeholder's reported incident. 2.2. Security solution software is checked for detection of the possible threat identified or related to the customer reported activity 2.3. Timeline is created for the malicious software activity and other behaviors reported in the incident. 2.4. Documentation is submitted based on the incident report.	2.1. Probing question template 2.2. Security solution usage and operations 2.3. malicious software activity and behavior	2.1. Computer operation skills 2.2. Communication skills 2.3. Interpreting work instructions 2.4. Basic troubleshooting skills 2.5. Interpersonal skills 2.6. Data analysis skills
3. Perform basic troubleshooting steps on the security solution software	3.1. Detection names are checked based on incident report 3.2. Security solution software condition is checked on its functionalities 3.3. Manual checking and verification are performed based on threat detection 3.4. Case follow-up is conducted based on severity of the threat or incident	3.1. Log and detection management 3.2. Security solution scan and operations procedure 3.3. Basic troubleshooting steps	3.1. Computer operation skills 3.2. Communication skills 3.3. Interpreting work instructions 3.4. Basic troubleshooting skills 3.5. Interpersonal skills 3.6. Data analysis skills
4. Perform escalation to information security department or vendor	4.1. Ticket details are escalated to information security department 4.2. Ticket details are emailed or submitted as an open case to computer security vendor/s	4.1. Ticket management systems 4.2. Email operation	4.1. Computer operation skills 4.2. Communication skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Security solution software	May include but not limited to the computer security software owned by the following companies (<i>not in any particular order</i>): 1.1. Kaspersky 1.2. McAfee 1.3. Microsoft 1.4. Symantec 1.5. Trend Micro
2. Security solution severity classification	Security solution severity classification will be based on the various vendors' classifications.

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Created ticket <ul style="list-style-type: none"> 1.1.1 Created ticket per incident detected based on monitoring and/or the stakeholder's report for possible malicious software behavior 1.1.2 Identified incident/s based on security solution severity classification 1.2 Performed probing on stakeholder's reported incident/s <ul style="list-style-type: none"> 1.2.1 Gathered data from stakeholder's reported incident. 1.2.2 Checked security solution software for detection of the possible threat identified or related to the customer reported activity. 1.2.3 Created timeline for the malicious software activity and other behaviors reported in the incident. 1.3 Performed basic troubleshooting steps on the security solution software <ul style="list-style-type: none"> 1.3.1 Checked detection names based on incident report 1.3.2 Performed manual checking and verification based on threat detection 1.3.3 Conducted case follow-up based on severity of threat or incident 1.4 Performed escalation to information security department or vendor <ul style="list-style-type: none"> 1.4.1 Escalated ticket details to information security department
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Appropriate supplies and materials 2.2 Applicable equipment 2.3 Appropriate software 2.4 Workplace or assessment area
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Demonstration with oral questioning 3.2 Written Exam 3.3 Portfolio with interview
<p>4. Context for Assessment</p>	<p>4.1 Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p>

UNIT OF COMPETENCY : ENSURE PRIVACY AND CONFIDENTIALITY OF ALL SECURITY EVENT/INCIDENT

UNIT CODE :CS-ICT25207

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitude required to ensure privacy and confidentiality of all security event/incident.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Secure document during ticket creation	<p>1.1. Documentation/report is created only on a company authorized <i>ticket management system</i>.</p> <p>1.2. Computer security policies are complied with in accordance with company standards.</p>	<p>1.1. Ticket management system</p> <p>1.2. Document handling security</p> <p>1.3. Computer security policies</p> <p>1.4. Security solution management application</p> <p>1.5. Provisions on R.A 10173 - Data Privacy Act of 2012</p> <p>1.6. Provisions on IRR of Data Privacy Act of 2012</p> <p>1.7. Provisions on R.A. 10175 – Cyber Crime Law</p> <p>1.8. DICT MC on Incident Handling</p>	<p>1.1. Computer operation skills</p> <p>1.2. Communication skills</p> <p>1.3. Interpreting work instructions</p> <p>1.4. Interpersonal skills</p>
2. Work within accepted codes of conduct	<p>2.1. Ensure work is reviewed and approved by a company authorized representative.</p> <p>2.2. Records are kept up-to-date and tasks are completed, neatly, accurately and in a timely manner as required.</p> <p>2.3. Clarification of unclear or ambiguous company procedures are seek with relevant personnel</p>	<p>2.1. Company/corporate policy</p> <p>2.2. Provisions on R.A 10173 - Data Privacy Act of 2012</p> <p>2.3. Provisions on IRR of Data Privacy Act of 2012</p> <p>2.4. Provisions on R.A. 10175 – Cyber Crime Law</p>	<p>2.1. Computer operation skills</p> <p>2.2. Communication skills</p> <p>2.3. Interpreting work instructions</p> <p>2.4. Interpersonal skills</p>
3. Follow confidentiality and privacy procedures	<p>3.1. <i>Company policies on confidentiality and privacy</i> are strictly followed.</p> <p>3.2. Incident-related matters are discussed within the confines of the facility and with appropriate security personnel only</p> <p>3.3. Advice and clarification are seek with relevant security personnel where potential confidentiality issues arise in dealings with incident related matters</p>	<p>3.1. Company/corporate policy</p> <p>3.2. Provisions on R.A 10173 - Data Privacy Act of 2012</p> <p>3.3. Provisions on IRR of Data Privacy Act of 2012</p> <p>3.4. Provisions on R.A. 10175 – Cyber Crime Law</p> <p>3.5. Implementing privacy and data protection measures</p>	<p>3.1. Computer operation skills</p> <p>3.2. Communication skills</p> <p>3.3. Interpreting work instructions</p> <p>3.4. Interpersonal skills</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Follow security procedures	4.1. Incident related records and other confidential documentation are stored and secured appropriately according to company policies and procedures. 4.2. All documents required by law to be stored for certain periods are clearly labeled and securely stored according to company policies and procedures. 4.3. Occupational health and safety (OHS) requirements are obeyed in accordance with company policies and procedures	4.1. Ticket management application 4.2. Email operation 4.3. Provisions on R.A 10173 - Data Privacy Act of 2012 4.4. Provisions on IRR of Data Privacy Act of 2012 4.5. Provisions on R.A. 10175 – Cyber Crime Law 4.6. Occupational health and safety (OHS) policies and procedures	4.1. Computer operation skills 4.2. Communication skills 4.3. Interpreting work instructions 4.4. Interpersonal skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Ticketing system	Ticketing system may include the following: 1.1. Reporter 1.2. Time 1.3. Date 1.4. Details
2. Company policies on confidentiality and privacy	May include: 2.1. Non-disclosure agreements or clauses 2.1.1. Information dissemination and requests for information are assessed with regard to what is and what is not disclosable 2.1.2. Discretion and judgement is used in all communications in adherence to company policy

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Secured document during ticket creation <ul style="list-style-type: none"> 1.1.1 Created documentation/report only on a company authorized ticket management system 1.1.2 Complied to computer security policies in accordance with company standards 1.2 Worked within accepted codes of conduct <ul style="list-style-type: none"> 1.2.1 Kept records up-to-date and completed tasks neatly, accurately and in a timely manner as required 1.2.2 Seek clarification of unclear or ambiguous company procedures with relevant personnel. 1.3 Followed confidentiality and privacy procedures <ul style="list-style-type: none"> 1.3.1 Strictly followed company policies on confidentiality and privacy. 1.3.2 Discussed incident-related matters within the confines of the facility and with appropriate security personnel only 1.4 Followed security procedures <ul style="list-style-type: none"> 1.4.1 Appropriately stored and secured incident related records and other confidential documentation according to company policies and procedures 1.4.2 Labeled clearly and securely stored all documents required by law to be stored for certain periods according to company policies and procedures
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Appropriate supplies and materials 2.2 Applicable equipment 2.3 Appropriate software 2.4 Workplace or assessment area
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Demonstration with oral questioning 3.2 Written Exam 3.3 Portfolio with interview
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1 Competency maybe assessed in actual workplace or at the designated TESDA Accredited Assessment Center.

SECTION 3 TRAINEE ENTRY REQUIREMENTS, TRAINER'S QUALIFICATIONS, LIST OF TOOLS, MATERIALS AND EQUIPMENT; AND TRAINING FACILITIES

3.1 TRAINEE ENTRY REQUIREMENTS

The trainees who wish to enter the course should possess the following requirements:

- Must have completed at least 10 yrs. basic education or its equivalent as per existing DepEd policies and regulations
- With skill functions which will be validated by a **qualifying exam** to be administered by the training institution
- Has the capacity to communicate in both oral and written forms.
- Physically able to operate/manipulate a computer input devices

This list does not include specific institutional requirements such as educational attainment, appropriate work experience, specific clearances and others that may be required from the trainees by the school or training center delivering the TVET program.

3.2 TRAINERS QUALIFICATIONS

- Must be a holder of Trainer's Methodology Certificate (TMC) **OR** must have training of trainer's certificate **OR** must be a practicing trainer for two (2) years within the last five (5) years;
- Must have at least 3-years relevant industry experience as cyber security practitioner or computer security support personnel for the past 5-years;

3.3 LIST OF TOOLS, EQUIPMENT AND MATERIALS

Recommended list of tools, equipment and materials for the conduct of training in Computer Security Incident Handling Level I (minimum *class size of 20 students/trainees*):

TOOLS		
Qty.	Unit	Description/Specification
21	units	Enterprise or Corporate level Security solution Applications (at least 5 different security solution software installed per PC using the license for Academic or Educational purposes; preferably company software as listed under ROV of the Core units of competency)
21	units	Learning Management System (Educational /Academic Subscription/License)
21	units	*Virtualization Applications (e.g Microsoft, VMware, Oracle)
21	units	*Office Productivity Tools (offline or online)
1	unit	Internet access, 10Mbps or higher (per class of 20 students/trainees)
1	pc	3 TB External hard drive or higher
1	unit	
1	unit	Switch, 32 ports or higher
3	pcs	White board eraser, magnetic
3	boxes	White board marker, assorted colors

* Can be either educational, license or open-source software

EQUIPMENT		
Qty.	Unit	Description/Specification
21	units	Desktop computer, (software dependent specifications) with mouse and keyboard Processor : i7 8 th Gen Core Processor or its equivalent and/or higher version Memory : 8GB DDR4 or higher Storage : 1TB 3.5-inch 7200 RPM Graphics : Integrated HD Graphics or external VGA card Accessories : Mouse and Keyboard Operating System : Win 10 Pro 64 Bit
21	units	Monitor, 24" Flat, 1920x1060, 60Hz Refresh Rate, PLS Panel, USB-Cx2, DP, HDMI, VGA Wall (Versa) mountable monitor
1	unit	LCD projector and projector screen
1	unit	Printer
1	unit	White board and / or glass board
21	sets	Ergonomic computer tables and chairs

MATERIALS		
Qty.	Unit	Description/Specification
21	pcs	Hand-outs / Learning materials manual (full-course)
1	pc	Video learning materials (offline & online)
21	pcs	Practice sets / materials (offline & online)

MATERIALS		
Qty.	Unit	Description/Specification
When needed	pcs	Reference books/materials (offline & online) Online Reference Subscription is a plus
5	reams (per training duration)	Bond/Copy paper, A4

Due to the fast-changing nature of the Information and Communications Technology (ICT) sector, TVET providers are reminded to use and provide their trainees with the latest technology tools, equipment and materials where appropriate and applicable.

Up-to-date tools, equipment and materials of equivalent functions can be used as alternatives. This also applies in consideration of community practices and their availability in the local market.

3.4 TRAINING FACILITIES

Based on class size of 20 students/trainees the space requirements for the teaching/learning and circulation areas are as follows:

TEACHING/LEARNING AREAS	SIZE IN METERS	AREA IN SQ. METERS	QTY	TOTAL AREA IN SQ. METERS
Computer/ Laboratory/ Lecture Area	6 x 8	48	1	48
Learning Resource Area	3 x 5	15	1	15
Wash & Toilet Area	2 x 2	4	2	8
Total				71
Facilities / Equipment / Circulation**				35.5
Total Area				106.5

**** Area requirement is equivalent to 30% of the total teaching/learning areas**

Appropriate consideration should be given in providing and allocating workspace, communications facilities, and the usual workplace amenities to ensure a proper learning environment. Where applicable, training shall be held or conducted in learning facilities in accordance with generally accepted industry standards and practice.

ACKNOWLEDGEMENTS

The Technical Education and Skills Development Authority (TESDA) wishes to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development and validation of these Training Regulations.

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