COMPETENCY STANDARDS

CYBER RISK ASSESSMENT LEVEL III



INFORMATION AND COMMUNICATIONS TECHNOLOGY SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY

East Service Road, South Luzon Expressway (SLEX), Taguig City, Metro Manila

Technical Education and Skills Development Act of 1994 (Republic Act No. 7796)

Section 22, "Establishment and Administration of the National Trade Skills Standards" of the RA 7796 known as the TESDA Act mandates TESDA to establish national occupational skills standards. The Authority shall develop and implement a certification and accreditation program in which private industry group and trade associations are accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in their respective areas in accordance with the guidelines to be set by the Authority.

@ 2024 by Technical Education and Skills Development Authority

All rights reserved. Any part of this publication may be used and reproduced, provided proper acknowledgement is made.

The Competency Standards (CS) serve as basis for the:

- 1 Registration and delivery of training programs;
- 2 Development of curriculum and assessment instruments; and

Each CS has two sections:

- Section 1 **Definition of Qualification** describes the qualification and defines the competencies that comprise the qualification.
- Section 2 **Competency Standards** gives the specifications of competencies required for effective work performance.

TABLE OF CONTENTS

INFORMATION AND COMMUNICATIONS TECHNOLOGY SECTOR CYBER RISK ASSESSMENT LEVEL III

		Page No.
SECTION 1	DEFINITION OF QUALIFICATION	1
SECTION 2	COMPETENCY STANDARDS	2 – 48
GLOSSARY	OF TERMS	49 – 50
ACNKOWLE	DGEMENTS	51

COMPETENCY STANDARDS FOR CYBER RISK ASSESSMENT LEVEL III

SECTION 1: DEFINITION OF QUALIFICATION

The **CYBER RISK ASSESSMENT LEVEL III** Qualification consists of competencies that a person must achieve assess the cyber security risk of an organization through evaluating compliance with cyber security standards and law and performing cyber security risk assessments.

The Units of Competency comprising this Qualification include the following:

UNIT CODE BASIC COMPETENCIES

- 400311319 Lead workplace communication
- 400311320 Lead small teams
- 400311321 Apply critical thinking and problem-solving techniques in the workplace
- 400311322 Work in a diverse environment
- 400311323 Propose methods of applying learning and innovation in the organization
- 400311324 Use information systematically
- 400311325 Evaluate occupational safety and health work practices
- 400311326 Evaluate environmental work practices
- 400311327 Facilitate entrepreneurial skills for micro-small-medium enterprises (MSMEs)

UNIT CODE COMMON COMPETENCIES

- ICT315202 Apply quality standards
- ICT311203 Perform Computer Operations

UNIT CODE CORE COMPETENCIES

CS-ICT251118 Evaluate compliance with cyber security standards and law CS-ICT251119 Perform cyber security risk assessments

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

• Cyber security risk assessor

SECTION 2: COMPETENCY STANDARDS

This section gives the details of the contents of the units of competency required in CYBER RISK ASSESSMENT LEVEL III

BASIC COMPETENCIES

UNIT OF COMPETENCY : LEAD WORKPLACE COMMUNICATION

UNIT CODE : 400311319

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to lead in the dissemination and discussion of ideas, information and issues in the workplace.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
 Communicate information about workplace processes 	 communication method is selected based on workplace procedures 1.2 Multiple operations involving several topics/areas are communicated following enterprise requirements 	 1.1. Organization requirements for written and electronic communication methods 1.2. Effective verbal communication methods 1.3. Business writing 1.4. Workplace etiquette 	 1.1. Organizing information 1.2. Conveying intended meaning 1.3. Participating in a variety of workplace discussions 1.4. Complying with organization requirements for the use of written and electronic communication methods 1.5. Effective business writing 1.6. Effective clarifying and probing skills 1.7. Effective questioning techniques (clarifying and probing)
2. Lead workplace discussions	 2.1 Response to workplace issues are sought following enterprise procedures 2.2 Response to workplace issues are provided immediately 	2.1 Organization requirements for written and electronic communication methods	 2.1 Organizing information 2.2 Conveying intended meaning 2.3 Participating in variety of

	ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		are made to workplace discussions on such	2.2 Effective verbal communication methods2.3 Workplace etiquette	workplace discussions 2.4 Complying with organization requirements for the use of written and electronic communication methods 2.5 Effective clarifying and probing skills
3.	Identify and communicate issues arising in the workplace	 3.1 Issues and problems are identified as they arise 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication 3.3 Dialogue is initiated with appropriate personnel 3.4 Communication problems and issues are raised as they arise 3.5 Identify barriers in communication to be addressed appropriately 	 3.1 Organization requirements for written and electronic communication methods 3.2 Effective verbal communication methods 3.3 Workplace etiquette 3.4 Communication problems and issues 3.5 Barriers in communication 	 3.1 Organizing information 3.2 Conveying intended meaning 3.3 Participating in a variety of workplace discussions 3.4 Complying with organization requirements for the use of written and electronic communication methods 3.5 Effective clarifying and probing skills 3.6 Identifying issues 3.7 Negotiation and communication skills

VARIABLE	RANGE
1. Methods of	May include:
communication	1.1. Non-verbal gestures
	1.2. Verbal
	1.3. Face-to-face
	1.4. Two-way radio
	1.5. Speaking to groups
	1.6. Using telephone
	1.7. Written
	1.8. Internet
2. Workplace discussions	May include:
	2.1. Coordination meetings
	2.2. Toolbox discussion
	2.3. Peer-to-peer discussion

1. Critical aspects of	Assessment requires evidence that the candidate:
Competency	1.1. Dealt with a range of communication/information at one
	time
	1.2. Demonstrated leadership skills in workplace communication
	1.3. Made constructive contributions in workplace issues
	1.4. Sought workplace issues effectively
	1.5. Responded to workplace issues promptly
	1.6. Presented information clearly and effectively written form
	1.7. Used appropriate sources of information
	1.8. Asked appropriate questions
	1.9. Provided accurate information
	The following resources should be provided:
2. Resource	2.1. Variety of Information
Implications	2.2. Communication tools
	2.3. Simulated workplace
3. Methods of	Competency in this unit must be assessed through
Assessment	3.1. Case problem
Assessment	3.2. Third-party report
	3.3. Portfolio
	3.4. Interview
	3.5. Demonstration/Role-playing
4. Context for Assessment	4.1. Competency may be assessed in the workplace or in simulated workplace environment

UNIT OF COMPETENCY UNIT CODE UNIT DESCRIPTOR

: LEAD SMALL TEAMS

: 400311320

: This unit covers the knowledge, skills and attitudes to lead small teams including setting, maintaining and monitoring team and individual performance standards.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Provide team leadership	 1.1. Work requirements are identified and presented to team members based on company policies and procedures 1.2. Reasons for instructions and requirements are communicated to team members based on company policies and procedures 1.3. Team members' queries and concerns are recognized, discussed and dealt with based on company practices 	 1.1 Facilitation of Team work 1.2 Company policies and procedures relating to work performance 1.3 Performance standards and expectations 1.4 Monitoring individual's and team's performance vis a vis client's and group's expectations 	 1.1 Communicatio n skills required for leading teams 1.2 Group facilitation skills 1.3 Negotiating skills 1.4 Setting performance expectation
2. Assign responsibilities	 2.1. Responsibilities are allocated having regard to the skills, knowledge and aptitude required to undertake the assigned task based on company policies. 2.2. Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible 	 2.1 Work plan and procedures 2.2 Work requirements and targets 2.2 Individual and group expectations and assignments 2.3 Ways to improve group leadership and membership 	 2.1 Communicatio n skills 2.2 Management skills 2.3 Negotiating skills 2.4 Evaluation skills 2.5 Identifying team member's strengths and rooms for improvement
3. Set performance	3.1 Performance expectations are	3.1 One's roles and responsibilities in the team	3.1 Communicatio n skills

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
expectations for team members	 established based on client needs 3.2 Performance expectations are based on individual team members knowledge, skills and aptitude 3.3 Performance expectations are discussed and disseminated to individual team members 	3.2 Feedback giving and receiving3.3 Performance expectation	3.2 Accurate empathy3.3 Congruence3.4 Unconditional positive regard3.5 Handling of Feedback
4. Supervised team performance	 4.1 Performance is <i>monitored</i> based on defined performance criteria and/or assignment instructions 4.2 Team members are provided with <i>feedback</i>, positive support and advice on strategies to overcome any deficiencies based on company practices 4.3 <i>Performance issues</i> which cannot be rectified or addressed within the team are referenced to appropriate personnel according to employer policy 4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction 4.5 Team operations are monitored to ensure that employer/client 	 4.1 Performance Coaching 4.2 Performance management 4.3 Performance Issues 	 4.1 Communicatio n skills required for leading teams 4.2 Coaching skill

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	 needs and requirements are met 4.6 Follow-up communication is provided on all issues affecting the team 4.7 All relevant documentation is completed in accordance with company procedures 		

VARIABLE	RANGE
1. Work requirements	May include: 1.1. Client Profile
	1.2. Assignment instructions
2. Team member's concerns	May include: 2.1. Roster/shift details
3. Monitor performance	May include: 3.1. Formal process
	3.2. Informal process
4. Feedback	May include:
	4.1. Formal process
	4.2. Informal process
5. Performance issues	May include:
	5.1. Work output
	5.2. Work quality
	5.3. Team participation
	5.4. Compliance with workplace protocols
	5.5. Safety
	5.6. Customer service

1. Critical aspects of	Assessment requires evidence that the candidate:
Competency	1.1. Maintained or improved individuals and/or team
	performance given a variety of possible scenario
	1.2. Assessed and monitored team and individual
	performance against set criteria
	1.3. Represented concerns of a team and individual to next
	level of management or appropriate specialist and to
	negotiate on their behalf
	1.4. Allocated duties and responsibilities, having regard to
	individual's knowledge, skills and aptitude and the needs
	of the tasks to be performed
	1.5. Set and communicated performance expectations for a
	range of tasks and duties within the team and provided
	feedback to team members
2. Resource	The following resources should be provided:
Implications	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
3. Methods of	Competency in this unit may be assessed through:
Assessment	3.1. Written Examination
	3.2. Oral Questioning
	3.3. Portfolio
4. Context for	4.1. Competency may be assessed in actual workplace or at
Assessment	the designated TESDA Accredited Assessment Center

UNIT OF COMPETENCY: APPLY CRITICAL THINKING AND PROBLEM-SOLVING TECHNIQUES IN THE WORKPLACE

UNIT CODE : 400311321 UNIT DESCRIPTOR : This unit 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/s of specific problems in the workplace.

	1	l	
ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Examine specific workplace challenges	 1.1. Variances are examined from normal operating parameters; and product quality. 1.2. Extent, cause and nature of the specific problem are defined through observation, investigation and <i>analytical techniques</i>. 1.3. <i>Problems</i> are clearly stated and specified. 	 1.1. Competence includes a thorough 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, enough for the identification of fundamental causes of specific workplace challenges. 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 analytical techniques (e.g., planning, attention, simultaneous and successive processing of information) in examining specific challenges in the workplace. 1.2. Identifying extent and causes of specific challenges in the workplace.
2. Analyze the causes of specific workplace challenges.	 2.1. Possible causes of specific problems are identified based on experience and the use of problem solving tools / analytical techniques. 2.2. Possible cause statements are 	2.1 Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to	2.1 Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information) in

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	developed based on findings. 2.3. Fundamental causes are identified per results of investigation conducted.	recognize non- standard situations. 2.2 Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations. 2.3 Relevant equipment and operational processes. 2.4 Enterprise goals, targets and measures. 2.5 Enterprise quality OSH and environmental requirement. 2.6 Enterprise information systems and data collation. 2.7 Industry codes and standards.	examining specific challenges in the workplace. 2.2 Identifying extent and causes of specific challenges in the workplace. 2.3 Providing clear- cut findings on the nature of each identified workplace challenges.
3. Formulate resolutions to specific workplace challenges	 3.1. All possible options are considered for resolution of the problem. 3.2. Strengths and weaknesses of possible options are considered. 3.3. Corrective actions are determined to resolve the problem and possible future causes. 3.4. Action <i>plans</i> are developed identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures 	 3.1. Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations 3.2. Relevant equipment and operational processes 3.3. Enterprise goals, targets and measures 3.4. Enterprise quality OSH and environmental 	 3.1. Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information) in examining specific challenges in the workplace. 3.2. Identifying extent and causes of specific challenges in the workplace. 3.3. Providing clear- cut findings on the nature of each identified workplace challenges.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		3.7. Industry codes and standards	3.4. Devising, communicating, implementing and evaluating strategies and techniques in addressing specific workplace challenges.
4. Implement action plans and communicate results	 4.1. Action plans are implemented and evaluated. 4.2. Results of plan implementation and recommendations are prepared. 4.3. Recommendations are presented to appropriate personnel. 4.4. Recommendations are followed-up, if required. 	 4.1 Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations 4.2. Relevant equipment and operational processes 4.3 Enterprise goals, targets and measures 4.4 Enterprise quality, OSH and environmental requirement 4.5 Principles of decision making strategies and techniques 4.6 Enterprise information systems and data collation 4.7 Industry codes and standards 	 4.1 Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information) in examining specific challenges in the workplace. 4.2 Identifying extent and causes of specific challenges in the workplace. 4.3 Providing clear-cut findings on the nature of each identified workplace challenges. 4.4 Devising, communicating, implementing and evaluating strategies and techniques in addressing specific workplace challenges.

VARIABLES	RANGE	
1. Parameters	May include: 1.1 Processes 1.2 Procedures	
2. Analytical techniques	1.3 Systems May include:	
	 2.1. Brainstorming 2.2. Intuitions/Logic 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. Problem	May include:	
	 3.1. Routine, non – routine and complex workplace and quality problems 3.2. Equipment selection, availability and failure 3.3. Teamwork and work allocation problem 3.4. Safety and emergency situations and incidents 3.5. Risk assessment and management 	
4. Action plans	May include:	
	 4.1. Priority requirements 4.2. Measurable objectives 4.3. Resource requirements 4.4. Timelines 4.5. Co-ordination and feedback requirements 4.6. Safety requirements 4.7. Risk assessment 4.8. Environmental requirements 	

1. Critical a Compet		 Analyzed the causes of specific workplace challenges. Formulated resolutions to specific workplace challenges.
2. Resourd Implicat		Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios / case studies / what ifs will be required as well as bank of questions which will be used to probe the reason behind the observable action.
3. Methods Assessr	nent 3.1. 3.2. 3.3. 3.4. The and unit situa ope asso sho wall The prot	mpetency in this unit may be assessed through: Observation Case Formulation Life Narrative Inquiry Standardized test unit will be assessed in a holistic manner as is practical may be integrated with the assessment of other relevant s of competency. Assessment will occur over a range of ations, which will include disruptions to normal, smooth ration. Simulation may be required to allow for timely essment of parts of this unit of competency. Simulation uld be based on the actual workplace and will include k through of the relevant competency components.
4. Context Assessr	for 4.1.	In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.

UNIT OF COMPETENCY : UNIT CODE : UNIT DESCRIPTOR :

WORK IN A DIVERSE ENVIRONMENT

: 400311322

: This unit covers the outcomes required to work effectively in a workplace characterized by diversity in terms of religions, beliefs, races, ethnicities and other differences.

		PERFORMANCE CRITERIA		
	ELEMENT	Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1.	Develop an individual's cultural awareness and sensitivity	 1.1. Individual differences with clients, customers and fellow workers are recognized and respected in accordance with enterprise policies and core values. 1.2. Differences are responded to in a sensitive and considerate manner 1.3. <i>Diversity</i> is accommodated using appropriate verbal and non-verbal communication. 	 1.1. Understanding cultural diversity in the workplace 1.2. Norms of behavior for interacting and dialogue with specific groups (e. g., Muslims and other non-Christians, non-Catholics, tribes/ethnic groups, foreigners) 1.3. Different methods of verbal and non-verbal communication in a multicultural setting 	 1.1. Applying cross- cultural communication skills (i.e. different business customs, beliefs, communication strategies) 1.2. Showing affective skills – establishing rapport and empathy, understanding, etc. 1.3. Demonstrating openness and flexibility in communication 1.4. Recognizing diverse groups in the workplace and community as defined by divergent culture, religion, traditions and practices
2.	Work effectively in an environment that acknowledges and values cultural diversity	 2.1 Knowledge, skills and experiences of others are recognized and documented in relation to team objectives. 2.2 Fellow workers are encouraged to utilize and share their specific qualities, skills or backgrounds with other team members and clients to enhance work outcomes. 2.3 Relations with customers and clients are maintained to show that 	 2.1 Value of diversity in the economy and society in terms of Workforce development 2.2 Importance of inclusiveness in a diverse environment 2.3 Shared vision and understanding of and commitment to team, departmental, and organizational goals and objectives 2.4 Strategies for customer service excellence 	 2.1 Demonstrating cross-cultural communication skills and active listening 2.2 Recognizing diverse groups in the workplace and community as defined by divergent culture, religion, traditions and practices 2.3 Demonstrating collaboration skills

	ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		diversity is valued by the business.		2.4 Exhibiting customer service excellence
3.	Identify common issues in a multicultural and diverse environment	 3.1 <i>Diversity-related</i> <i>conflicts</i> within the workplace are effectively addressed and resolved. 3.2 Discriminatory behaviors towards customers/stakeholders are minimized and addressed accordingly. 3.3 Change management policies are in place within the organization. 	 3.1 Value, and leverage of cultural diversity 3.2 Inclusivity and conflict resolution 3.3 Workplace harassment 3.4 Change management and ways to overcome resistance to change 3.5 Advanced strategies for customer service excellence 	 3.1 Addressing diversity-related conflicts in the workplace 3.2 Eliminating discriminatory behavior towards customers and co-workers 3.3 Utilizing change management policies in the workplace

	VARIABLE		RANGE
1.	Diversity	commu 1.1 1.2 1.3	ers to diversity in both the workplace and the nity and may include divergence in : Religion Ethnicity, race or nationality Culture
			Gender, age or personality Educational background
2.	Diversity-related conflicts	May inc 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9	Clude conflicts that result from: Discriminatory behaviors Differences of cultural practices Differences of belief and value systems Gender-based violence Workplace bullying Corporate jealousy Language barriers Individuals being differently-abled persons Ageism (negative attitude and behavior towards old people)

1. Critical aspects of Competency	 Assessment requires evidence that the candidate: 1.1 Adjusted language and behavior as required by interactions with diversity 1.2 Identified and respected individual differences in called surface and surfac	
	colleagues, clients and customers1.3 Applied relevant regulations, standards and codes of practice	
2. Resource Implications	The following resources should be provided:	
	2.1 Access to workplace and resources	
	2.2 Manuals and policies on Workplace Diversity	
3. Methods of	Competency in this unit may be assessed through:	
Assessment	3.1 Demonstration or simulation with oral questioning	
	3.2 Group discussions and interactive activities	
	3.3 Case studies/problems involving workplace diversity issues	
	3.4 Third-party report	
	3.5 Written examination	
	3.6 Role Plays	
4. Context for	Competency assessment may occur in workplace or	
Assessment	any appropriately simulated environment	

UNIT OF COMPETENCY:

TENCY: PROPOSE METHODS OF APPLYING LEARNING AND INNOVATION IN THE ORGANIZATION

UNIT CODE: 400311323UNIT DESCRIPTOR: This unit covers the knowledge, skills and attitudes required
to assess general obstacles in the application of learning

This unit covers the knowledge, skills and attitudes required to assess general obstacles in the application of learning and innovation in the organization and to propose practical methods of such in addressing organizational challenges.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS	
 Assess work procedures, processes and systems in terms of innovative practices 	 1.1. Reasons for innovation are incorporated to work procedures. 1.2. <i>Models of innovation</i> are researched. 1.3. Gaps or barriers to innovation in one's work area are analyzed. 1.4. Staff who can support and foster innovation in the work procedure are identified. 	 1.1 Seven habits of highly effective people. 1.2 Character strengths that foster innovation and learning (Christopher Peterson and Martin Seligman, 2004) 1.3 Five minds of the future concepts (Gardner, 2007). 1.4 Adaptation concepts in neuroscience (Merzenich, 2013). 1.5 Transtheoretical model of behavior change (Prochaska, DiClemente, & Norcross, 1992). 	 1.1 Demonstrating collaboration and networking skills. 1.2 Applying basic research and evaluation skills 1.3 Generating insights on how to improve organizational procedures, processes and systems through innovation. 	
2. Generate practical action plans for improving work procedures, processes	 2.1 Ideas for innovative work procedure to foster innovation using individual and group techniques are conceptualized 2.2 Range of ideas with other team members and colleagues are evaluated and discussed 2.3 Work procedures and processes subject to change are selected based on <i>workplace requirements</i> (feasible and innovative). 2.4 Practical action plans are proposed to facilitate simple changes in the work procedures, processes and systems. 2.5 <i>Critical inquiry</i> is applied and used to 	 2.1 Seven habits of highly effective people. 2.2 Character strengths that foster innovation and learning (Christopher Peterson and Martin Seligman, 2004) 2.3 Five minds of the future concepts (Gardner, 2007). 2.4 Adaptation concepts in neuroscience (Merzenich, 2013). 2.5 Transtheoretical model of behavior change (Prochaska, DiClemente, & Norcross, 1992). 	 2.1 Assessing readiness for change on simple work procedures, processes and systems. 2.2 Generating insights on how to improve organizational procedures, processes and systems through innovation. 2.3 Facilitating action plans on how to apply innovative procedures in the organization. 	

ELEMENT	PERFORMANCE CRITERIA REQUIRED ENT Italicized terms are elaborated KNOWLEDGE		REQUIRED SKILLS	
	in the Range of Variables			
	facilitate discourse on adjustments in the simple work procedures, processes and systems.			
3. Evaluate the effectiveness of the proposed action plans	 3.1 Work structure is analyzed to identify the impact of the new work procedures 3.2 Co-workers/key personnel is consulted to know who will be involved with or affected by the work procedure 3.3 Work instruction operational plan of the new work procedure is developed and evaluated. 3.4 Feedback and suggestion are recorded. 3.5 Operational plan is updated. 3.6 Results and impact on the developed work instructions are reviewed 3.7 Results of the new work procedure are evaluated 3.8 Adjustments are recommended based on results gathered 	 3.1 Five minds of the future concepts (Gardner, 2007). 3.2 Adaptation concepts in neuroscience (Merzenich, 2013). 3.3 Transtheoretical model of behavior change (Prochaska, DiClemente, & Norcross, 1992). 	 3.1 Generating insights on how to improve organizational procedures, processes and systems through innovation. 3.2 Facilitating action plans on how to apply innovative procedures in the organization. 3.3 Communicating results of the evaluation of the proposed and implemented changes in the workplace procedures and systems. 3.4 Developing action plans for continuous improvement on the basic systems, procedures in the organization. 	

VARIABLE	RANGE
1. Reasons	 May include: 1.1. Strengths and weaknesses of the current systems, processes and procedures. 1.2. Opportunities and threats of the current systems, processes and procedures.
2. Models of innovation	 May include: 2.1. Seven habits of highly effective people. 2.2. Five minds of the future concepts (Gardner, 2007). 2.3. Neuroplasticity and adaptation strategies.
3. Workplace requirements	May include: 3.1. Feasible 3.2. Innovative
4. Gaps or barriers	May include: 4.1. Machine 4.2. Manpower 4.3. Methods 4.4. Money
5. Critical Inquiry	 May include: 5.1. Preparation. 5.2. Discussion. 5.3. Clarification of goals. 5.4. Negotiate towards a Win-Win outcome. 5.5. Agreement. 5.6. Implementation of a course of action. 5.7. Effective verbal communication. See our pages: Verbal Communication and Effective Speaking. 5.8. Listening. 5.9. Reducing misunderstandings is a key part of effective negotiation. 5.10. Rapport Building. 5.11. Problem Solving. 5.12. Decision Making. 5.13. Assertiveness. 5.14. Dealing with Difficult Situations.

1. Critical aspects of	Assessment requires evidence that the candidate:		
Competency	1.1. Established the reasons why innovative		
	systems are required		
	1.2. Established the goals of a new innovative		
	system		
	1.3. Analyzed current organizational systems to		
	identify gaps and barriers to innovation.		
	1.4. Assessed work procedures, processes and		
	systems in terms of innovative practices.		
	1.5. Generated practical action plans for improving		
	work procedures, and processes.		
	1.6. Reviewed the trial innovative work system and		
	adjusted reflect evaluation feedback,		
	knowledge management systems and future		
	planning.		
	1.7. Evaluated the effectiveness of the proposed		
	action plans.		
2. Resource Implications	The following resources should be provided:		
	2.1. Pens, papers and writing implements.		
	2.2. Cartolina.		
	2.3. Manila papers		
3. Methods of Assessment	Competency in this unit may be assessed through:		
	3.1. Psychological and behavioral Interviews.		
	3.2. Performance Evaluation.		
	3.3. Life Narrative Inquiry.		
	3.4. Review of portfolios of evidence and third-party		
	workplace reports of on-the-job performance.		
	3.5. Sensitivity analysis.		
	3.6. Organizational analysis. 3.7. Standardized assessment of character		
4. Context for Assessment	strengths and virtues applied.		
	Competency may be assessed individually in the actual workplace or simulation environment in TESDA		
	accredited institutions.		

UNIT OF COMPETENCY: USE INFORMATION SYSTEMATICALLY

UNIT CODE : 400311324

UNIT DESCRIPTOR

: This unit covers the knowledge, skills and attitudes required to use technical information systems, apply information technology (IT) systems and edit, format & check information.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Use technical information	 1.1. <i>Information</i> are collated and organized into a suitable form for reference and use 1.2. Stored information are classified so that it can be quickly identified and retrieved when needed 1.3. Guidance are advised and offered to people who need to find and use information 	 1.1. Application in collating information 1.2. Procedures for inputting, maintaining and archiving information 1.3. Guidance to people who need to find and use information 1.4. Organize information 1.5. classify stored information for identification and retrieval 1.6. Operate the technical information system by using agreed procedures 	 1.1. Collating information 1.2. Operating appropriate and valid procedures for inputting, maintaining and archiving information 1.3. Advising and offering guidance to people who need to find and use information 1.4. Organizing information into a suitable form for reference and use 1.5. Classifying stored information for identification and retrieval 1.6. Operating the technical information system by using agreed procedures
2. Apply information technology (IT)	 2.1. Technical information system is operated using agreed procedures 2.2. Appropriate and valid procedures are operated for inputting, maintaining and archiving information 2.3. Software required are utilized to execute the project activities 2.4. Information and data obtained are handled, edited, formatted and checked from a range of 	 2.1. Attributes and limitations of available software tools 2.2. Procedures and work instructions for the use of IT 2.3. Operational requirements for IT systems 2.4. Sources and flow paths of data 2.5. Security systems and measures that can be used 2.6. Extract data and format reports 	 2.1. Identifying attributes and limitations of available software tools 2.2. Using procedures and work instructions for the use of IT 2.3. Describing operational requirements for IT systems 2.4. Identifying sources and flow paths of data

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	 internal and external sources 2.5. Information are extracted, entered, and processed to produce the outputs required by customers 2.6. Own skills and understanding are shared to help others 2.7. Specified security measures are implemented to protect the confidentiality and integrity of project data held in IT systems 	2.7. Methods of entering and processing information2.8. WWW enabled applications	 2.5. Determining security systems and measures that can be used 2.6. Extracting data and format reports 2.7. Describing methods of entering and processing information 2.8. Using WWW applications
3. Edit, format and check information	 3.1 Basic editing techniques are used 3.2 Accuracy of documents are checked 3.3 Editing and formatting tools and techniques are used for more complex documents 3.4 Proof reading techniques is used to check that documents look professional 	 3.1 Basic file-handling techniques 3.2 Techniques in checking documents 3.3 Techniques in editing and formatting 3.4 Proof reading techniques 	 3.1 Using basic file- handling techniques is used for the software 3.2 Using different techniques in checking documents 3.3 Applying editing and formatting techniques 3.4 Applying proof reading techniques

VARIABLE	RANGE
1. Information	May include:
	1.1. Property
	1.2. Organizational
	1.3. Technical reference
2. Technical information	May include:
	2.1. paper based
	2.2. electronic
3. Software	May include:
	3.1. spreadsheets
	3.2. databases
	3.3. word processing
	3.4. presentation
4. Sources	May include:
	4.1. other IT systems
	4.2. manually created
	4.3. within own organization
	4.4. outside own organization
	4.5. geographically remote
5. Customers	May include:
	5.1. colleagues
	5.2. company and project management
	5.3. clients
6. Security measures	May include:
	6.1. access rights to input;
	6.2. passwords;
	6.3. access rights to outputs;
	6.4. data consistency and back-up;
	6.5. recovery plans

1. Critical aspects of	Assessment requires evidence that the candidate:
Competency	1.1. Used technical information systems and information
	technology
	1.2. Applied information technology (IT) systems
	1.3. Edited, formatted and checked information
2. Resource Implications	The following resources should be provided:
	2.1. Computers
	2.2. Software and IT system
3. Methods of Assessment	Competency in this unit <u>MUST</u> be assessed through:
	3.1. Direct Observation
	3.2. Oral interview and written test
4. Context for Assessment	4.1. Competency may be assessed individually in the
	actual workplace or through accredited institution

UNIT OF COMPETENCY :

EVALUATE OCCUPATIONAL SAFETY AND HEALTH WORK PRACTICES

UNIT CODE UNIT DESCRIPTOR

: 400311325

: This unit covers the knowledge, skills and attitudes required to interpret-Occupational Safety and Health practices, set OSH work targets, and evaluate effectiveness of Occupational Safety and Health work instructions

	ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1.	Interpret Occupational Safety and Health practices	 1.1 OSH work practices issues are identified relevant to work requirements 1.2 OSH work standards and procedures are determined based on applicability to nature of work 1.3 Gaps in work practices are identified related to relevant OSH work standards 	 1.1. OSH work practices issues 1.2. OSH work standards 1.3. General OSH principles and legislations 1.4. Company/ workplace policies/ guidelines 1.5. Standards and safety requirements of work process and procedures 	 1.1. Communication skills 1.2. Interpersonal skills 1.3. Critical thinking skills 1.4. Observation skills
2.	Set OSH work targets	 2.1 Relevant work information are gathered necessary to determine OSH work targets 2.2 OSH Indicators based on gathered information are agreed upon to measure effectiveness of workplace OSH policies and procedures 2.3 Agreed OSH indicators are endorsed for approval from appropriate personnel 2.4 OSH work instructions are received in accordance with workplace policies and procedures* 	 2.1. OSH work targets 2.2. OSH Indicators 2.3. OSH work instructions 2.4. Safety and health requirements of tasks 2.5. Workplace guidelines on providing feedback on OSH and security concerns 2.6. OSH regulations Hazard control procedures 2.7. OSH trainings relevant to work 	 2.1. Communication skills 2.2. Collaborating skills 2.3. Critical thinking skills 2.4. Observation skills
3.	Evaluate effectiveness of Occupational Safety and Health work instructions	 3.1 OSH Practices are observed based on workplace standards 3.2 Observed OSH practices are measured against approved OSH metrics 3.3 Findings regarding effectiveness are assessed and gaps identified are implemented based on OSH work standards 	 3.1. OSH Practices 3.2. OSH metrics 3.3. OSH Evaluation Techniques 3.4. OSH work standards 	3.1. Critical thinking skills3.2. Evaluating skills

VARIABLE	RANGE	
1. OSH Work	May include:	
Practices Issues	1.1 Workers' experience/observance on presence of work hazards	
	1.2 Unsafe/unhealthy administrative arrangements	
	(prolonged work hours, no break-time, constant overtime, scheduling of tasks)	
	1.3 Reasons for compliance/non-compliance to use of PPEs or other OSH procedures/policies/ guidelines	
2. OSH Indicators	May include:	
	2.1 Increased of incidents of accidents, injuries	
	2.2 Increased occurrence of sickness or health	
	complaints/symptoms	
	2.3 Common complaints of workers' related to OSH	
	2.4 High absenteeism for work-related reasons	
3. OSH Work	May include:	
Instructions	3.1 Preventive and control measures, and targets	
	3.2 Eliminate the hazard (i.e., get rid of the dangerous machine	
	3.3 Isolate the hazard (i.e. keep the machine in a closed room and operate it remotely; barricade an unsafe area off)	
	3.4 Substitute the hazard with a safer alternative (i.e., replace the machine with a safer one)	
	 3.5 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) 	
	3.6 Use engineering controls to reduce the risk (i.e. use safety guards to machine)	
	3.7 Use personal protective equipment	
	3.8 Safety, Health and Work Environment Evaluation	
	3.9 Periodic and/or special medical examinations of workers	
4. OSH metrics	May include:	
	4.1 Statistics on incidence of accidence and injuries	
	4.2 Morbidity (Type and Number of Sickness)	
	4.3 Mortality (Cause and Number of Deaths)	
	4.4 Accident Rate	

 Critical aspects of Competency 	 Assessment requires evidence that the candidate: 1.1. Identify OSH work practices issues relevant to work requirements 1.2. Identify gaps in work practices related to relevant OSH work standards 1.3. Agree upon OSH Indicators based on gathered information to measure effectiveness of workplace OSH policies and procedures 1.4. Receive OSH work instructions in accordance with workplace policies and procedures 1.5. Compare Observed OSH practices with against approved OSH work instructions 1.6. Assess findings regarding effectiveness based on OSH work standards
2. Resource Implications	 The following resources should be provided: 2.1 Facilities, materials, tools and equipment necessary for the activity
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Observation/Demonstration with oral questioning 3.2 Third party report 3.3 Written exam
4. Context for Assessment	4.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY UNIT CODE UNIT DESCRIPTOR

: EVALUATE ENVIRONMENTAL WORK PRACTICES

: 400311326

: This unit covers the knowledge, skills and attitude to interpret environmental Issues, establish targets to evaluate environmental practices and evaluate effectiveness of environmental practices

ELEMENTS	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
 Interpret environmental practices, policies and procedures 	 1.1 Environmental work practices issues are identified relevant to work requirements 1.2 Environmental Standards and Procedures nature of work are determined based on Applicability to nature of work 1.3 Gaps in work practices related to Environmental Standards and Procedures are identified 	 1.1 Environmental Issues 1.2 Environmental Work Procedures 1.3 Environmental Laws 1.4 Environmental Hazardous and Non-Hazardous Materials 1.5 Environmental required license, registration or certification 	 1.1. Analyzing Environment al Issues and Concerns 1.2. Critical thinking 1.3. Problem Solving 1.4. Observation Skills
2. Establish targets to evaluate environmental practices	 2.1. Relevant information is gathered necessary to determine environmental work targets 2.2. Environmental Indicators based on gathered information are set to measure environmental work targets 2.3. Indicators are verified with appropriate personnel 	 2.1. Environmental Indicators 2.2. Relevant Environment Personnel or expert 2.3. Relevant Environmental Trainings and Seminars 	 2.1. Investigative Skills 2.2. Critical thinking 2.3. Problem Solving 2.4. Observation Skills
3. Evaluate effectiveness of environmental practices	 3.1. Work environmental practices are recorded based on workplace standards 3.2. Recorded work environmental practices are compared against planned indicators 3.3. Findings regarding effectiveness are assessed and gaps identified are implemented based on environment work standards and procedures 3.4. Results of environmental assessment are conveyed to appropriate personnel 	 1.1. Environmental Practices 1.2. Environmental Standards and Procedures 	 3.1 Documentation and Record Keeping Skills 3.2 Critical thinking 3.3 Problem Solving 3.4 Observation Skills

VARIABLE	R A N G E	
1. Environmental Practices Issues	 May include: 1.1 Water Quality 1.2 National and Local Government Issues 1.3 Safety 1.4 Endangered Species 1.5 Noise 1.6 Air Quality 1.7 Historic 1.8 Waste 1.9 Cultural 	
2. Environmental Indicators	May include:2.1Noise level2.2Lighting (Lumens)2.3Air Quality - Toxicity2.4Thermal Comfort2.5Vibration2.6Radiation2.7Quantity of the Resources2.8Volume	

1. Critical aspects of Competency	 Assessment requires evidence that the candidate: 1.1. Identified environmental issues relevant to work requirements 1.2. Identified gaps in work practices related to Environmental Standards and Procedures 1.3. Gathered relevant information necessary to determine environmental work targets 1.4. Set environmental indicators based on gathered information to measure environmental work targets 1.5. Recorded work environmental practices are recorded based on workplace standards 1.6. Conveyed results of environmental assessment to appropriate personnel
2. Resource Implications	 The following resources should be provided: 2.1 Workplace/Assessment location 2.2 Legislation, policies, procedures, protocols and local ordinances relating to environmental protection 2.3 Case studies/scenarios relating to environmental protection
 Methods of Assessment 	 Competency in this unit may be assessed through: 3.1 Written/ Oral Examination 3.2 Interview/Third Party Reports 3.3 Portfolio (citations/awards from GOs and NGOs, certificate of training – local and abroad) 3.4 Simulations and role-plays
4. Context for Assessment	 4.1 Competency may be assessed in actual workplace or at the designated TESDA center.

UNIT OF COMPETENCY :

FACILITATE ENTREPRENEURIAL SKILLS FOR MICRO-SMALL-MEDIUM ENTERPRISES (MSMEs) 400311327

UNIT CODE UNIT DESCRIPTOR :

:

This unit covers the outcomes required to build, operate and grow a micro/small-scale enterprise.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Develop and maintain micro-small- medium enterprise (MSMEs) skills in the organization	 1.1 Appropriate <i>business</i> <i>strategies</i> are determined and set for the enterprise based on current and emerging business environment. 1.2 <i>Business operations</i> are monitored and controlled following established procedures. 1.3 Quality assurance measures are implemented consistently. 1.4 Good relations are maintained with staff/workers. 1.5 Policies and procedures on occupational safety and health and environmental concerns are constantly observed. 	 1.1 Business models and strategies 1.2 Types and categories of businesses 1.3 Business operation 1.4 Basic Bookkeeping 1.5 Business internal controls 1.6 Basic quality control and assurance concepts 1.7 Government and regulatory processes 	 1.1 Basic bookkeeping/ accounting skills 1.2 Communication skills 1.3 Building relations with customer and employees 1.4 Building competitive advantage of the enterprise
2. Establish and Maintain client- base/market	 2.1 Good customer relations are maintained 2.2 New customers and markets are identified, explored and reached out to. 2.3 Promotions/Incentives are offered to loyal customers 2.4 Additional products and services are evaluated and tried where feasible. 2.5 <i>Promotional/advertising initiatives</i> are carried out where necessary and feasible. 	 2.1 Public relations concepts 2.2 Basic product promotion strategies 2.3 Basic market and feasibility studies 2.4 Basic business ethics 	 2.1 Building customer relations 2.2 Individual marketing skills 2.3 Using basic advertising (posters/ tarpaulins, flyers, social media, etc.)
3. Apply budgeting and financial management skills	 3.1 Enterprise is built up and sustained through judicious control of cash flows. 3.2 Profitability of enterprise is ensured though appropriate <i>internal controls</i>. 3.3 Unnecessary or lower-priority expenses and purchases are avoided. 	 3.1 Cash flow management 3.1 Basic financial management 3.2 Basic financial accounting 3.3 Business internal controls 	 3.1 Setting business priorities and strategies 3.2 Interpreting basic financial statements 3.3 Preparing business plans

VARIABLE	RANGE
1. Business	May include:
strategies	1.1. Developing/Maintaining niche market
	1.2. Use of organic/healthy ingredients
	1.3. Environment-friendly and sustainable practices
	1.4. Offering both affordable and high-quality products and services
	1.5. Promotion and marketing strategies (e. g., on-line marketing)
2. Business	May include:
operations	2.1 Purchasing
	2.2 Accounting/Administrative work
	2.3 Production/Operations/Sales
3. Internal controls	May include:
	3.1 Accounting systems
	3.2 Financial statements/reports
	3.3 Cash management
4. Promotional/	May include:
Advertising	4.1 Use of tarpaulins, brochures, and/or flyers
initiatives	4.2 Sales, discounts and easy payment terms
	4.3 Use of social media/Internet
	4.4 "Service with a smile"
	4.5 Extra attention to regular customers

1.	Critical aspects	Assessment requires evidence that the candidate :
	of competency	1.1. Demonstrated basic entrepreneurial skills
		1.2. Demonstrated ability to conceptualize and plan a
		micro/small enterprise
		1.3. Demonstrated ability to manage/operate a micro/small-
		scale business
2.	Resource	The following resources should be provided:
	Implications	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	Competency in this unit may be assessed through :
	Assessment	3.1. Written examination
		3.2. Demonstration/observation with oral questioning
		3.3. Portfolio assessment with interview
		3.4. Case problems
4.	Context of	4.1. Competency may be assessed in workplace or in a
	Assessment	simulated workplace setting
		4.2. Assessment shall be observed while tasks are being
		undertaken whether individually or in-group
L		

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	

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 Italicized terms 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 <i>materials</i> are checked against workplace standards and specifications. 1.3. Faulty materials related to work are identified and isolated. 1.4. <i>Faults</i> 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. 	software and	 1.1. Reading skills required to interpret work instruction 1.2. Critical thinking 1.3. Interpreting work instructions
2. Assess own work	 2.1 <i>Documentation</i> 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 <i>Errors</i> 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 <i>quality standards</i>, 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 Italicized terms 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 <i>customer</i> satisfaction is monitored. 	improvement processes 3.2. Company customers	 3.1. Solution providing and decision- making 3.2. Practice company process improvement procedure

	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 	1. 1.
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 	2. 2. 2.
3	Documentation	 3.1 Organization work procedures 3.2 Manufacturer's instruction manual 3.3 Customer requirements 3.4 Forms 	2 Ma 3 Cu
4	Errors	4.1 Errors may be related but not limited to the following4.1.1. Deviation from the requirements of the Client4.1.2. Deviation from the requirement of the organization	4.
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 	th 5. 5. 5.

			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

1	Critical aspect of	Assessment requires evidence that candidate:
	competency	 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	The assessor may select two (2) of the following
	assessment	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 : UNIT CODE : UNIT DESCRIPTOR :

: PERFORM COMPUTER OPERATIONS

ICT311203

R: 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 Italicized terms 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 <i>hardware</i> and <i>software</i> are selected according to task assigned and required outcome 1.3. Task is planned to ensure <i>OH&S guidelines</i> 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 <i>storage media</i> according to requirements 2.4. Work is performed within <i>ergonomic guidelines</i> 	 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. <i>Desktop icons</i> 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 information3.2. Searching and browsing files and data

ELEMENT	PERFORMANCE CRITERIA Italicized terms 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/syste m 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 machines5.2 Making backup files

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 guidelines3.2. Enterprise procedures
4. Storage media	 Storage media include the following but not limited to: 4.1. Cloud storage 4.2. Flash drive 4.3. SD Card 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

1. Critical aspect of competency	 Assessment requires evidence that the candidate: 1.1. Selected and used hardware components correctly and according to the task requirement 1.2. Identified and explain the functions of both hardware and software used, their general features and capabilities 1.3. Produced accurate and complete data in accordance with the requirements 1.4. Used appropriate devices and procedures to transfer files/data accurately 1.5. Maintained computer system
2. Method of assessment	 2.1. The assessor may select two of the following assessment methods to objectively assess the candidate: 2.1.1. Observation 2.1.2. Questioning 2.1.3. Practical demonstration
3. Resource implication	3.1. Computer hardware with peripherals3.2. 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: EVALUATE COMPLIANCE WITH CYBER SECURITY STANDARDS AND LAW

UNIT CODE: CS-ICT251118

UNIT DESCRIPTOR: This unit covers the outcomes required in researching existing security standards and laws, analyzing compliance activities and aligning organization's/company activities to required standards.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	Required Knowledge	Required Skills
1. Research existing security standards and laws	 1.1 Standards and laws required for organizations cyber security operations are identified and summarized findings based on industry standards 1.2 Required laws and standards are analyzed and aligned to organizational cyber operations based on industry standards 1.3 Organization's existing cyber security compliance strategies are obtained and analyzed and according to organizational policies and procedures 1.4 Organization's existing cyber security compliance strategies are documented and according to organizational policies and procedures 1.5 Time periods and benchmarking of compliance evaluation requirements are determined based on industry standards 	 1.1 Office productivity applications 1.2 Cybersecurity frameworks International Organization for Standardization (ISO) 27001 National Institute of Science and Technology (NIST) – Cybersecurity framework 1.3 Understanding organization's existing cybersecurity polices and strategies 1.4 Cyber Threat Analysis fundamentals 1.5 Cyber security laws 1.6 Secure design principles 1.7 Risk management 	 1.1 Computer operation skills 1.2 Researching skills 1.3 Communicatio n skills 1.4 Documentatio n skills 1.5 Analysis skills
2. Analyze compliance activities	2.1 Compliance assessment according are conducted	2.1 Office productivity applications	2.1 Computer operation skills

	 according to organizational and legislative requirements 2.2 Assessment findings are documented according to organizational policies and procedures 2.3 Areas of non-compliance and near misses are identified and documented based on industry standards 	 2.2 Principles of cyber security 2.3 Methods of identifying cyber security incidents 2.4 Identifying non-compliance and near-miss 2.5 Cyber security laws 2.4 Principles of cyber security incidents 2.5 Cyber security laws 2.4 Principles of cyber security incidents 2.5 Cyber security laws 2.4 Principles of cyber security incidents 2.5 Cyber security laws 2.4 Principles of cyber security incidents 2.5 Cyber security laws 2.4 Principles of cyber security incidents 2.5 Cyber security laws
 Align organization's/ company activities to required standards 	 3.1 All compliance requirements are developed and documented according to organizational and legislative requirements 3.2 Requirements in preparation to realign business activities are distributed to <i>required</i> <i>personnel</i> based on company procedures 3.3 Evaluation strategy is developed according to 	 3.1 Office productivity applications 3.2 Cybersecurity frameworks 3.3 Principles of cyber security 3.4 Methods of identifying cyber security incidents 2.5 Coerdination 3.1 Computer operation skills 3.2 Researching skills 3.3 Communicatio n skills 3.4 Documentatio n skills 3.5 Analysis skills
	 developed according to organizational policies and procedures 3.4 Documents are submitted to required personnel according to organizational policies and procedures 	 3.5 Coordination with required personnel 3.6 Evaluating of strategy for cyber security 3.7 Cyber security laws

	VARIABLE	RANGE
1.	Standards and laws required for organizations cyber security operations	May include but not limited to: 1.1 Standards 1.1.1 International Organization for Standardization (ISO) 27001 1.1.2 NIST SP 800-53 R4 1.1.3 NIST SP 800-122 1.2 Laws 1.2.1 General Data Protection Regulation (GDPR) 1.2.2 Critical Infrastructure Protection laws
2.	Organization's existing cyber security compliance strategies	May include but not limited to: 2.1 Security testing 2.2 Develop and implement a security policy 2.3 Security awareness training 2.4 Data Loss Prevention (DLP) mechanisms 2.5 Access controls strategies

3. required personnel	May include but not limited to:
	3.1 IT security team leader
	3.2 Security analysts
	3.3 Client

1. Critical aspects of competency	 1.1 Researched existing security standards and laws 1.2 Analyzed compliance activities 1.3 Aligned organization's/company activities to required standards
2. Resource implications	The following resources should be provided:2.1 Facilities, equipment, tools, materials and supplies relevant to the unit of competency
3. Methods of assessment	Competency in this unit must be assessed through any or combination of the following: 3.1 Demonstration with questioning 3.2 Written Test 3.3 Oral questioning/interview
4. Context for assessment	4.1 Competency maybe assessed in actual workplace or at the designated TESDA accredited Assessment Center

UNIT OF COMPETENCY: PERFORM CYBER SECURITY RISK ASSESSMENTS

UNIT CODE: CS-ICT251119

UNIT DESCRIPTOR: This unit covers the outcomes required in Preparing to perform risk assessment, performing risk assessment and finalizing risk assessment

	PERFORMANCE CRITERIA		
ELEMENT	Italicized terms are elaborated in	Required	Required
	the Range of Variables	Knowledge	Skills
1. Prepare to perform risk assessment	 1.1 Organization's risk culture is analyzed based industry standards 1.2 <i>Findings</i> are documented according to organizational requirements 1.3 <i>Legislative and organizational cyber security risk requirements</i> are documented and researched according to organizational requirements 1.4 Organization's risk register is obtained and analyzed according to organizational requirements 1.5 Organization's risk register is determined for its currency against organizational legislative requirements 1.6 Risk assessment plan are developed and documented according to organizational requirements 1.7 Risk assessment plan is communicated with <i>required personnel</i> according to organizational requirements 	 1.1 Office productivity applications 1.2 Cybersecurity frameworks 1.3 Cybersecurity attacks and malwares 1.4 Cybersecurity exploits, vulnerabilities and threats 1.5 Organization risk register 1.6 Developing risk assessment plan 1.7 	 1.1 Computer operation skills 1.2 Researching skills 1.3 Communication skills 1.4 Documentation skills 1.5 Analysis skills
2. Perform risk assessment	 organizational requirements 2.1 Risk assessments are initiated according to plan 2.2 Threats, assets, vulnerabilities are assessed based on industry standards 2.3 Process and outcomes of risk assessment are documented according to organizational policies and procedures 	 2.1 NIST SP 800- 53. 2.2 Log collection and monitoring 2.3 Office productivity applications 2.4 Cybersecurity frameworks 	 2.1 Computer operation skills 2.2 Researching skills 2.3 Communicatio n skills 2.4 Documentation skills 2.5 Analysis skills 2.6

3. Finalize risk assessment	 3.1 Findings are analyzed against risk register and determined operations outside of organization's risk appetite 3.2 <i>Operational measures</i> are developed against risk register requirements according to organizational requirements 3.3 Risk assessment findings are communicated to required personnel according to organizational requirements 3.4 <i>Areas of non-compliance and solutions</i> are communicated to required personnel according to organizational requirements 3.5 Documentation is finalized according to organizational requirements 	 2.5 Cybersecurity attacks and malwares 2.6 Cybersecurity exploits, vulnerabilities and threats 2.7 Detecting malicious attempts using security tools and techniques 2.8 Cyber security laws 2.9 Threat intelligence 2.10 Network administration 2.11 Network application security 2.12 Risk management 2.1 NIST SP 800- 53. 2.2 Log collection and monitoring 2.3 Office productivity applications 2.4 Cybersecurity frameworks 2.5 Cybersecurity attacks and malwares 2.6 Cybersecurity exploits, vulnerabilities and threats 2.7 Detecting malicious attempts using security tools and techniques 2.8 Cyber security exploits, vulnerabilities 2.7 Detecting malicious 2.8 Cyber security intelligence 	 2.1 Computer operation skills 2.2 Researching skills 2.3 Communication n skills 2.4 Documentation skills 2.5 Analysis skills
		2.9 Threat	

2.11 Network application security Risk management
management

VARIABLE	RANGE
1. Findings	May include but not limited to: 1.1 Vulnerability findings 1.2 Threat findings 1.3 Risk findings
 Legislative and organizational cyber security risk requirements 	May include but not limited to: 2.1 Laws 2.1.1 General Data Protection Regulation (GDPR) 2.1.2 Payment Card Industry Data Security Standard 2.2 Organizational 2.2.1 Mitigate cyber risks 2.2.2 Maintain business continuity 2.2.3 Meet industry standards and best practices
3. required personnel	May include but not limited to: 3.1 IT security team leader 3.2 Security analysts 3.3 Client
4. Threats, assets, vulnerabilities	May include but not limited to: 4.1 Threats 4.1.1 Malwares 4.1.2 Social engineering 4.1.3 DDoS 4.2 Assets 4.2.1 Hardware 4.2.2 Software 4.2.3 Data 4.3 Vulnerabilities 4.3.1 Unpatched systems 4.3.2 Weak password 4.3.3 Unsecure Wi-fi networks
5. Operational measures	May include but not limited to: 5.1 Patch management 5.2 Access controls 5.3 Data encryption
6. Areas of non-compliance and solutions	May include but not limited to: 6.1 Areas of non-compliance 6.1.1 Not defining scope of assessment 6.1.2 Failing to comply with cyber security standards 6.2 Solutions 6.2.1 Defined scope of assessment 6.2.2 Aligned with cyber security standards

1. Critical aspects of	1.1 Prepared to perform risk assessment
competency	1.2 Performed risk assessment
	1.3 Finalized risk assessment
2. Resource implications	The following resources should be provided:
	2.1 Facilities, equipment, tools, materials and supplies
	relevant to the unit of competency
3. Methods of assessment	Competency in this unit must be assessed through any or
	combination of the following:
	3.1 Demonstration with questioning
	3.2 Written Test
	3.3 Oral questioning/interview
4. Context for assessment	4.1 Competency maybe assessed in actual workplace or at
	the designated TESDA accredited Assessment Center

GLOSSARY OF TERMS

Network administration	The management and operation of computer networks, including
	tasks such as network configuration, monitoring, troubleshooting, and maintenance to ensure the network's
	availability, reliability, and security.
Network application security	The practice of securing software applications and services that operate over a network, such as web applications, APIs, and client-server applications. Network application security aims to protect against common vulnerabilities and threats that may exploit weaknesses in application code, design, or implementation.
NIST	The National Institute of Standards and Technology (NIST) is a U.S. government agency responsible for developing and promoting standards, guidelines, and best practices to enhance the security and resilience of information systems. In the context of cyber risk assessment, organizations may reference NIST publications, such as the NIST Cybersecurity Framework (CSF) and Special Publication (SP) series, to establish risk management processes, controls, and security measures.
Non-compliance	Failure to adhere to laws, regulations, industry standards, or organizational policies and procedures related to cybersecurity and data protection. Non-compliance increases the organization's exposure to cyber risks, potential legal and regulatory penalties, and reputational damage.
Near misses	Incidents or events that narrowly avoid causing harm, loss, or damage to an organization's assets, operations, or reputation. Near misses provide valuable insights into potential vulnerabilities or weaknesses in the organization's cybersecurity defenses and risk management practices.
Organizational cyber operations	The activities, processes, and procedures performed by an organization to manage, protect, and secure its information technology (IT) systems, networks, and digital assets. Organizational cyber operations encompass a wide range of functions, including cybersecurity operations, incident response, threat intelligence, risk management, and compliance. In cyber risk assessment, evaluating organizational cyber operations involves assessing the effectiveness of cybersecurity practices and controls in mitigating cyber risks and protecting the organization's assets and data.
Risk assessment plan	A structured approach or methodology for conducting cyber risk assessments within an organization. A risk assessment plan outlines the objectives, scope, methodology, roles and responsibilities, timeline, and resources required for performing risk assessments.
Risk culture	The collective attitudes, beliefs, values, and behaviors of individuals within an organization regarding risk awareness, risk management, and decision-making. A strong risk culture promotes transparency, accountability, and collaboration in addressing cyber risks, while a weak risk culture may lead to

	completeness, and incleases rick management
	complacency, negligence, and inadequate risk management practices.
Risk management	The process of identifying, analyzing, evaluating, and responding to risks to achieve organizational objectives while minimizing potential adverse impacts. Risk management involves assessing the likelihood and impact of risks, implementing controls and safeguards to mitigate risks, and monitoring and reviewing risk mitigation efforts.
Risk register	A centralized repository or database that documents identified risks, including their descriptions, likelihood, impact, mitigation measures, and status. A risk register provides visibility into the organization's risk landscape, helps prioritize risk mitigation efforts, and facilitates communication and decision-making regarding risk management.
Threat	A potential event, circumstance, or action that poses harm, danger, or damage to an organization's information assets, operations, or reputation. Threats may include cyber threats, such as malware, phishing, denial of service (DoS) attacks, and insider threats, as well as physical threats, natural disasters, and human errors.
Threat actor	An individual, group, organization, or entity that carries out cyber-attacks or exploits vulnerabilities in IT systems, networks, or applications for malicious purposes. Threat actors may include hackers, cybercriminals, nation-state actors, insider threats, and hack
Network administration	The management and operation of computer networks, including tasks such as network configuration, monitoring, troubleshooting, and maintenance to ensure the network's availability, reliability, and security.
Network application security	The practice of securing software applications and services that operate over a network, such as web applications, APIs, and client-server applications. Network application security aims to protect against common vulnerabilities and threats that may exploit weaknesses in application code, design, or implementation.

ACKNOWLEDGEMENTS

The MANAGEMENT and STAFF of the TESDA Secretariat

Qualifications and Standards Office (QSO)

- Dir. EL CID H. CASTILLO, Executive Director

Competency Standards Development Division (CSDD)

- MS. BERNADETTE S. AUDIJE, Division Chief
- MR. ADRIAN BRIAN C. SABANAL, Senior TESD Specialist

A special thanks to CybersCool Defcon Inc. for validating this Competency Standards (CS)

www.cyberscooldefcon.com

Competency Standards are available in both printed and electronic copies for more information, please contact: **Technical Education and Skills Development Authority (TESDA)** Tele Fax No.: 8818-7728 or visit our website: www.tesda.gov.ph