



Republic of the Philippines
DEPARTMENT OF EDUCATION



K to 12 BASIC EDUCATION CURRICULUM

TECHNOLOGY AND LIVELIHOOD EDUCATION

CURRICULUM GUIDE

Exploratory Course on

COMPUTER HARDWARE SERVICING

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

**INDUSTRIAL ARTS – COMPUTER HARDWARE SERVICING
(Exploratory)**

Curriculum Guide for the Exploratory Course on Computer Hardware Servicing

For you to get a complete picture of the complete TLE exploratory course on Computer Hardware Servicing, you are hereby provided with the Curriculum Guide on Computer Hardware Servicing.

Content Standard	Performance Standard	Learning Competencies	Projects/Activities	Assessment	Duration
Lesson 1 - USE HAND TOOLS					
<i>Demonstrate understanding of/on:</i> 1. Tool selection 2. Hardware tools	1. Tasks to be undertaken are properly identified 2. Appropriate hand tools are identified and selected according to the task requirements	LO1. PREPARE HAND TOOLS	Activity 1.1 Prepare a plan in maintaining a personal computer.	<ul style="list-style-type: none"> Performance-based assessment 	2 hrs
1. Operation of hand tools 2. Function of hand tools 3. Common faults of using hand tools 4. Tools preparation	1. Appropriate hand tools checked for proper operation and safety 2. Unsafe or faulty tools identified 3. Marked all tools for repair according to standard company procedures		Activity 1.1 Segregation of tools according to its classification. Self Check 1.1 Knowing functions of hand tools	<ul style="list-style-type: none"> Written test 	3 hrs
1. Proper use of tools <ul style="list-style-type: none"> ESO tools handtools 2. Proper use of cleaning materials	1. Tools used according to tasks undertaken 2. All safety procedures in using tools observed at all times 3. Malfunctions, unplanned or	LO2. USE APPROPRIATE HAND TOOLS AND TEST	Activity 2.1 Proper use of tools based on its function Self Check 2.1	<ul style="list-style-type: none"> Performance-based assessment 	3 hrs

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	unusual events reported to the supervisor	EQUIPMENT	Computer cleaning chart		
<ol style="list-style-type: none"> Maintenance of tools and equipment Storage of tools Standard operational procedures, principles and techniques in maintaining a tools 	<ol style="list-style-type: none"> Tools used according to tasks undertaken Routine maintenance of tools undertaken according to standard operational procedures, principles and techniques Tools stored safely in appropriate locations in accordance with manufacturers specifications or standard operating procedures 	LO3. MAINTAIN HAND TOOLS	<p>Activity 3.1 Conduct maintenance of tools</p> <p>Self Check 3.1 Good practices and benefits of proper storage of tools</p>	<ul style="list-style-type: none"> Performance-based assessment 	2 hrs
Lesson 2: PERFORM MENSURATION AND CALCULATION					
<ol style="list-style-type: none"> Types of components and object to be measured are identified <ul style="list-style-type: none"> memory data storage capacity Correct specifications of the relevant sources 	<ol style="list-style-type: none"> Object or component to be measured is identified Correct specifications obtained from relevant source Accurate measurements are obtained for job 	LO1. SELECT COMPONENTS TO BE MEASURED	<p>Activity 1.1 Identifying type of memory module</p> <p>Activity 1.2 Identifying types of storage drive and their interface</p>	<ul style="list-style-type: none"> Performance-based assessment /or Written test 	5 hrs
<ol style="list-style-type: none"> Conversion and calculations 	<ol style="list-style-type: none"> Calculation needed to complete work tasks are performed using the four fundamentals operations (addition, subtractions, multiplication and division) 	LO2. CARRY OUT MEASUREMENTS AND CALCULATION	<p>Activity 2.1 Perform conversion of decimal numbers to binary and vice versa</p> <p>Activity 2.2 Perform</p>	<ul style="list-style-type: none"> Written test 	5 hrs

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	2. Numerical computation is self-checked and corrected for accuracy		conversion from bytes to kilobytes, megabytes, gigabytes, terabytes		
Lesson 3: PREPARE AND INTERPRET TECHNICAL DRAWING					
<ul style="list-style-type: none"> • Elements • Benefits • Basic symbols 	<ol style="list-style-type: none"> 1. Correct technical drawing selected according to job requirements 2. Technical drawings segregated in accordance with the types and kinds of drawings 3. Components, assemblies or objects recognized as required 	LO1. IDENTIFY DIFFERENT KINDS OF TECHNICAL DRAWINGS.	1. Preparation of system and program flowcharts	<ul style="list-style-type: none"> • Performance-based assessment /or • Written test 	3 hours
<ul style="list-style-type: none"> • Skills in interpreting in flowchart. <ul style="list-style-type: none"> ➤ types of flowchart 	<ol style="list-style-type: none"> 4. Dimensions of the key features of the objects depicted in the drawing correctly identified 5. Symbols used in the drawing identified and interpreted correctly 6. Drawing checked and validated against job requirements or equipment in accordance with standard operating procedures 	LO2. INTERPRET TECHNICAL DRAWING.		<ul style="list-style-type: none"> • Performance-based assessment /or • Written test 	3hours
Lesson 4 : PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES					
<ul style="list-style-type: none"> • Hazards and risks identification and 	1. Workplace hazards and risks are identified and clearly	LO1. IDENTIFY HAZARDS AND	Implement 5s in the computer workplace	<ul style="list-style-type: none"> • Situation analysis 	4 hour

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control <ul style="list-style-type: none"> ➤ for users and technicians ➤ equipment damage and data lost ➤ environment 	explained. <ol style="list-style-type: none"> 2. Hazards/risks and its corresponding indicators are identified in with the company procedures. 3. Contingency measures are recognized and established in accordance with organizational procedures. 	RISKS.		<ul style="list-style-type: none"> • Interview • Practical examination • Written examination 	
<ul style="list-style-type: none"> • Computer Work Station Ergonomics 	<ol style="list-style-type: none"> 1. Effects of hazards are determined. 2. OHS issues and concerns are identified in accordance with workplace requirements and 3. Relevant workplace OHS legislation. 	LO2. EVALUATE HAZARDS AND RISKS.		<ul style="list-style-type: none"> • Interview • Written examination • Simulation 	3 hour
<ul style="list-style-type: none"> • Safety regulations in the workplace • OHS Procedures in controlling hazards and risk. • Methods of controlling hazards and risk 	<ol style="list-style-type: none"> 1. OHS procedures for controlling hazards and risk are strictly followed. 2. Procedures in dealing with workplace accidents, fire and emergencies are followed in accordance with the organization's OHS policies. 	LO3. CONTROL HAZARDS AND RISKS.		<ul style="list-style-type: none"> • Written examination • Interview • Case/situation analysis • Simulation 	3 hours

“By three methods we may learn wisdom: First, by reflection, which is noblest; second, by imitation, which is easiest; and third by experience, which is the bitterest.”