

# Electronic Products Assembly and Servicing NC II

## Course Description

This course is designed to develop & enhance the knowledge, skills, & attitudes of an Electronic Products Technician, in accordance with industry standards. It covers the basic and common competencies in addition to the core competencies such as assembling electronic products, preparing PCB modules and installing and servicing consumer and industrial electronic products and systems.

### Nominal Duration

• Basic Competencies	68 hrs.
• Common Competencies	88 hrs.
• Core Competencies	144 hrs.
• Supervise Work-Based Training	80 hrs.
• Institutional Assessment	8 hrs.

**TOTAL 388 hrs**

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

***Electronic Products Assembler;  
Domestic Appliance Service Technician;  
Audio-Video Service Technician;  
Industrial Electronic Technician;  
Electronic Production Line Assembler;  
Factory Production Worker.***

### TRAINEE ENTRY REQUIREMENTS:

- At least 15 years of age
- Physically and mentally fit
- Can communicate in English, both oral and written
- Can perform basic mathematical operations
- Must undergo Career Profiling and Trainability Evaluation

TWC Training is guided by the ten (10) basic principles of Competency-Based Training (CBT) delivery.

1. The training is based on curriculum developed from the competency standards;
2. Learning is modular in its structure;
3. Training delivery is individualized and self-paced;
4. Training is based on work that must be performed;
5. Training materials are directly related to the competency standards and the curriculum modules;
6. Assessment is based in the collection of evidence of the

7. performance of work to the industry required standard;
7. Training is based on both on and off-the-job components;
8. Allows for recognition of prior learning (RPL) or current competencies;
9. Training allows for multiple entry and exit; and
10. Approved training programs are Nationally Accredited

## BASIC COMPETENCIES

Unit of Competency	Module Title	Learning Outcomes	Nominal Duration
• Participate in workplace communications	• Participating in workplace communications	<ul style="list-style-type: none"> <li>• Follow routine spoken messages</li> <li>• Perform workplace duties following written notices</li> <li>• Obtain and convey workplace information</li> <li>• Complete relevant work-related documents</li> <li>• Participate in workplace meeting and discussion applying gender-fair language</li> </ul>	20 hrs
• Work in a team environment	• Observing gender sensitivity in the workplace	<ul style="list-style-type: none"> <li>• Discuss the differences between sex and gender</li> <li>• Discuss gender identity &amp; sexual orientation</li> <li>• Analyse the different manifestations of gender inequality in TVET and in society</li> <li>• Discuss gender &amp; rights based approach to sexual &amp; reproductive health including HIV-AIDS awareness and prevention</li> </ul>	12 hrs
	• Working in a team environment	<ul style="list-style-type: none"> <li>• Describe team role and scope</li> <li>• Identify individual role &amp; responsibilities within a team</li> <li>• Develop effective workplace relationship including personal values &amp; beliefs related to gender</li> <li>• Work as a team member</li> <li>• Contribute to work group activities</li> </ul>	4 hrs
• Practice career professionalism	• Demonstrating work and entrepreneurial values and gender sensitivity	<ul style="list-style-type: none"> <li>• Describe the purpose of work and enterprise</li> <li>• Identify and deal with ethical problems</li> <li>• Apply work and entrepreneurial values and gender sensitivity</li> <li>• Maintain integrity of conduct in the workplace</li> </ul>	4 hrs
	• Practicing career professionalism	<ul style="list-style-type: none"> <li>• Integrate gender perspectives with personal and organizational goals</li> <li>• Set and meet work priorities</li> <li>• Maintain professional growth and development</li> </ul>	4 hrs

## Course Structure

• Practice occupational health and safety procedures	• Practicing basic house-keeping procedures	<ul style="list-style-type: none"> <li>• Sort and remove unnecessary items</li> <li>• Arrange items</li> <li>• Maintain work areas, tools and equipment</li> <li>• Follow standardized work process and procedures</li> <li>• Perform work spontaneously</li> </ul>	12 hrs
	• Practicing occupational health and safety procedures	<ul style="list-style-type: none"> <li>• Identify hazards and risks</li> <li>• Evaluate hazards and risks</li> <li>• Control hazards and risks</li> <li>• Maintain occupational health and safety awareness including women's issues/ concerns relative to OSH</li> </ul>	12 hrs

## COMMON COMPETENCIES

Unit of Competency	Module Title	Learning Outcomes	Nominal Duration
• Apply Quality Standards	• Applying Quality Standards	<ul style="list-style-type: none"> <li>• Assess quality of received materials</li> <li>• Assess own work</li> <li>• Engage in quality improvement</li> </ul>	8 hrs
• Perform Computer Operation	• Performing Computer Operation	<ul style="list-style-type: none"> <li>• Plan and prepare for task to be undertaken</li> <li>• Input data into computer</li> <li>• Access information using computer</li> <li>• Produce output/data using computer system</li> <li>• Use basic functions of a web browser to locate information</li> <li>• Maintain computer equipment and systems</li> </ul>	16 hrs
• Perform Mensuration and Calculation	• Performing Mensuration and Calculation	<ul style="list-style-type: none"> <li>• Select measuring instruments</li> <li>• Carry out measurement and calculation</li> <li>• Maintain measuring instruments</li> </ul>	8 hrs
• Prepare and Interpret Technical Drawings	• Preparing and Interpret Technical Drawings	<ul style="list-style-type: none"> <li>• Identify different kinds of technical drawings</li> <li>• Interpret technical drawing</li> <li>• Prepare/make changes on electrical/electronic schematic and drawings</li> <li>• Store technical drawings and equipment/ instruments</li> </ul>	16 hrs
• Use Hand Tools	• Using Hand Tools	<ul style="list-style-type: none"> <li>• Plan and prepare for task to be undertaken</li> <li>• Prepare hand tools</li> <li>• Use appropriate hand tools and equipment</li> <li>• Maintain hand tools</li> </ul>	16 hrs

## Course Structure

Unit of Competency	Module Title	Learning Outcomes	Nominal Duration
• Terminate and Connect Electrical wiring and Electronic Circuits	• Terminating and Connecting Electrical wiring and Electronic Circuits	<ul style="list-style-type: none"> <li>Plan and prepare for termination/connection of electrical wiring/electronic circuits</li> <li>Terminate/connect electrical wiring/electronic circuits</li> <li>Test termination/ connection of electrical wiring /electronics circuits</li> </ul>	16 hrs
• Test electronic components	• Testing electronic components	<ul style="list-style-type: none"> <li>Determine criteria for testing electronics components</li> <li>Plan an approach for component testing</li> <li>Test components</li> <li>Evaluate the testing process</li> </ul>	8 hrs

## Course Structure

### CORE COMPETENCIES

Unit of Competency	Module Title	Learning Outcomes	Nominal Duration
• Assemble Electronic Products	• Assembling Electronic Products	<ul style="list-style-type: none"> <li>Prepare to assemble electronics products</li> <li>Prepare/ Make PCB modules</li> <li>Mount and solder electronic components</li> <li>Assemble electronic products</li> <li>Test and inspect assembled electronic products</li> </ul>	32 hrs
• Service consumer electronic products and systems	• Servicing consumer electronic products and systems	<ul style="list-style-type: none"> <li>Prepare unit, tools and workplace for installation and service</li> <li>Install consumer electronic products and systems</li> <li>Diagnose faults and defects consumer electronic products and systems</li> <li>Maintain/Repair consumer electronic products</li> <li>Re-assemble and test repaired consumer electronic products</li> </ul>	80 hrs
• Service industrial electronic modules, products and systems	• Servicing industrial electronic modules, products and systems	<ul style="list-style-type: none"> <li>Prepare unit, tools and workplace for installation and service</li> <li>Install industrial electronic modules/products/systems</li> <li>Diagnose faults and defects of industrial electronic modules/systems/products</li> <li>Maintain/Repair industrial electronic products</li> <li>Re-assemble and test repaired industrial electronics products</li> </ul>	32 hrs



## TESDA Women's Center

### VISION

*“TESDA Women's Center is the lead TVET Institution of excellence in empowering Filipino women.”*

### MISSION

*“As the lead TVET Institution of excellence in women empowerment, TESDA Women's Center advocates and provides programs and services geared towards quality-assured, inclusive and gender-fair TVET.”*

## ELECTRONIC PRODUCTS ASSEMBLY AND SERVICING NC II



For inquiries, please call us at

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