



# ELECTRONIC COMPONENT SPECIFICATION AND TESTING TECHNIQUE

HRDC REG. COURSE #: 10001530646

#### Certification

• ·Attendance - NIQ

#### For

- Electromedist
- Biomedical Engineer
- Technologist
- Technical Manager
- Medical Electronic Lecturer
- Student

#### Fees

RM2000 per pax

\*Students gets special discount of 50%



SALES@NIQENGINEERING.COM

#### Introduction

- NIQ Engineering Sdn Bhd is Registered HRD Corp Training Provider, MBOT and MEA Approved Training Provider located in Pinggiran Subang Shah Alam Selangor.
- we provide equipment repair / maintenance training program for Electronic, Electrical & Biomedical equipment up to component level repair. Most of our training programs are HRDF Claimable program.

## Electronic Component Specifications and Testing Technique.

#### Trainer of Program

Tc. Ahmad Kamil bin Abdul Kaiyem is Accredited / Certified from HRD Corp Malaysia with working experiences more than 20 years in equipment repair and maintenances.

Most engineers and technicians prefer to perform equipment-level repair or PCB-level repair by **immediately purchasing** new equipment or defective PCBs. The budget required for this ranges from RM500 to RM10,000 for new PCBs or RM5,000 to RM20,000 for new equipment. In contrast, performing component-level repair, which involves repairing the board and replacing faulty components, requires a budget between RM10 and RM200 to resolve the equipment problems. By opting for component-level repair, cost savings of more than 100 times can be achieved compared to purchasing new PCBs or equipment.

Aligning with our vision to develop local expertise up to component-level repair as PCB Repair Specialists, NIQ Engineering Sdn Bhd, an HRD Corp Training Provider & MBOT Approved Training Provider, will conduct Component Level Repair training to enhance engineers' and technicians' knowledge, skills, and techniques related to component-level repairs.

#### **Course Modules**

- Identification of component specification based on available information on component body
- Generate datasheet PDF of component specification through internet or data books
- Testing and verify status of components using digital Multimeter, LCR Meter and Curve Tracer.
- Comparison wave form / data reference to verify status of components.
- Summarize waveform and data reference of each components.

#### **Learning Outcomes**

- Understanding of electronic component specification and testing technique.
- Applying components testing and safety procedure.
- Perform testing and measurement of electronic components using Multimeter and Curve Tracer.
- Analyse signal data and waveform reference to verify component status.
- Create electronic component testing checklist according to board required..



## Tentative of Program (TBC)

Duration: 2 Days

## Day 1

08:30	Introduction to Training Module
09:00	Pre Test - Examination
09:30	Practical 1- Identification of Component Specification based on available information on component body
10:45	Coffee Beark
11:00	Practical 2- Generate datasheet PDF of Component Specification through Internet or data books
12:00	Practical 3 – Perform Testing , measurement and verify status of components using Digital Multi Meter  • Passive Component / Fusible
13:00	Lunch Beark
14:00	Single Diode , Dual Diode , Bridge Diode and Zener Diode
15:30	Coffee Break
15:45	Bipolar Transistor & Darlington Transistor , Mosfet
17:00	Dismissal

## Day 2

08:30	Practical 4 – Perform measurement and verify status of components using LCR Meter  • Passive Components
10:00	Coffee Break
10:15	Practical 5- Perform Testing and verify status of component using Curve Tracer / Huntron Tracker / Fault Detector • Capacitance / Diodes and Zener Diode /Transistors/SCR
13:00	Lunch Break
14:00	Practical 6 - Testing and verify status of component using Curve Tracer / Huntron Tracker / Fault Detector  • Triac and Mosfet
15:00	Practical 7 – Perform Testing and verify status of components using DC  • Power Supply
15:30	Coffee Break
15:45	Practical 8 - Create electronic component testing checklist according to board required.
16:30	Post Test -Examination
17:00	Dismissal



VISIT OUR WEBSITE

WWW.NIQENGINEERING.COM



MORE INFORMATION CONTACT US

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#### TRAINING PROVIDER REGISTRATION CERTIFICATE

**AKTA PEMBANGUNAN SUMBER MANUSIA BERHAD, 2001** 

### **NIQ ENGINEERING SDN BHD**

is hereby registered as a training provider under PEMBANGUNAN SUMBER MANUSIA BERHAD

APPROVAL DATE	EXPIRY DATE
02/11/2024	01/11/2025

This approval is subject to the current terms and conditions of Pembangunan Sumber Manusia Berhad

21/10/2024

Release Date

PEMBANGUNAN SUMBER MANUSIA BERHAD

**DELIVERING QUALITY, DEVELOPING EXCELLENCE**