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29/4 A, 2ND FLOOR, BEHIND TILAK NAGAR METRO GATE NO. 3,
TILAK NAGAR, NEW DELHI-18

MOBILE: +91-8929250332, +91-9716992246

EMAIL: info@multitechinstitute.com

Website: www.multitechinstitute.com

Laptop Repairing Course

What will you learn in this course?

- ❖ Learn about All Basic Electrinios Parts of Laptop & Desktop
- ❖ Learn about Complete Schematic Diagram & Board Viewer
- ❖ Complete Solution of BIOS Programming & Editing
- ❖ Advance Level Training on BGA Machine
- ❖ How to use I/O Programmer?
- ❖ Data & Signal Level Check with DSO/CRO Machine
- ❖ Laptop & Desktop Assembling and disassembling
- ❖ GFX to NON-GFX Conversion
- ❖ All types of Problems Solution for Laptop & Desktop
- ❖ Latest Generation Motherboard Repairing Tricks
- ❖ Hidden Trick of Laptop & Desktop Repairing
- ❖ Signal, Data, Frequency & Clock Level Training
- ❖ Dead Laptop & Desktop Repairing
- ❖ Water Damage Laptop & Desktop Repairing
- ❖ Complete IC Chip Level Training

SYLLABUS

➤ Basic Electronics

- ✓ Introduction of (Volt, current, Watt, Ohms)
- ✓ Introduction of (AC/DC)
- ✓ How to Use Digital Multimeter
- ✓ **Identification of Electronics Components**
 - Resistor, Capacitor, Transistor, Mosfet, Diode, Crystal, IC, Transformer, Fuse, Jumper, Thermistor, Switch, Coil etc.
- ✓ **Resistor**
 - Working Concept of Resistor
 - Types of Resistor
 - Symbol, Unit, Denoting Letter of Resistor
 - Resistor Color Coding Concept
 - SMD Resistor Value
 - How to test Resistor on motherboard
- ✓ **Capacitor**
 - What is Capacitor?
 - Types of Capacitor.
 - What is Symbol, unit and Denoting Letter of Capacitor
 - Series and Parallel concept of Capacitor
 - Inboard and outboard Capacitor Testing
- ✓ **Diode**
 - Working Concept of Diode
 - How many types of Diode
 - Denoting Letter and Symbol of Diode
 - Bridge Rectifier Diode Concept
 - Testing of all types of Diode on motherboard
- ✓ **Transistor**
 - Working concept of Transistor on motherboard
 - Transistor Types
 - What is Symbol and Denoting Letter of Transistor
 - SMD and Normal Transistor Identification
 - Onboard Testing of SMD and Normal Transistor
- ✓ **Coil**
 - Identification of Difference types of Coil
 - Working of Coil (Inductor)
 - Types of Coil
 - Symbol, unit, Denoting Letter Concept of Coil
 - Ok Testing of all types of Coil



✓ **Mosfet**

- Concept of SMD Mosfet
- Working concept of 3 pin, 6 pin, 8 pin Mosfet on motherboard
- Types of Mosfet
- What is Denoting letter and symbol of Mosfet
- Gate, Drain, Source pin Details
- Onboard Testing of all Types of Mosfet

✓ **IC / Chip**

- Working Concept of IC/Chip
- Identification of Difference Types of IC
- IC ok Testing on board

✓ **Transformer**

- Working Difference Types of Transformer
- Working of Transformer
- Symbol, Denoting Letter Concept of Transformer
- Testing Concept of Transformer

✓ **Crystal**

- Working Concept of Crystal
- RTC Crystal
- Symbol, unit, Denoting Letter Concept of Crystal
- Testing of Crystal by Multimeter and CRO Machine

✓ **Fuse**

- Working Concept
- Symbol, Denoting Letter Concept of Fuse
- Testing and Repair Concept of Fuse

✓ **Thermistor**

- Types of Difference Thermistor
- Working of Thermistor
- Testing Concept of Thermistor
- NTC, PTC Thermistor



➤ **Soldering & De-Soldering Practice**

- ✓ How to remove all motherboard components
Like- capacitor, transistor, mosfet, crystal, coil, diode, fuse etc.?
- ✓ How to fix all electronics components on motherboard easily?
- ✓ How to remove and fix all types of IC/chip from motherboard?
- ✓ How to remove and fix all types of port, connector, slot, socket
Like -VGA Port, USB Port, ps2 port, SATA connector, CMOS battery?

➤ Tracing of Laptop and Desktop Motherboard

- ✓ Volt in section.
- ✓ Step down section
- ✓ VRM section
- ✓ Ram section
- ✓ Chip section (Graphic Section, North Bridge, South Bridge Section)
- ✓ Battery section (Charging & Discharging Section)
- ✓ I/O (Input-Output) section
- ✓ Bios section
- ✓ LAN section
- ✓ Sound section
- ✓ USB section
- ✓ VGA section
- ✓ SATA section
- ✓ 3.3v, 5v section
- ✓ 1.2v, 1.8v, 1.5v, 2.5volt section
- ✓ Odd section
- ✓ LVDS section (LCD & LED Panel and Screen section)
- ✓ Keyboard section
- ✓ Clock generator section
- ✓ Wi-Fi section
- ✓ Fan section
- ✓ RTC section
- ✓ Soc section
- ✓ Adaptor circuit
- ✓ Sensor circuit3
- ✓ Intel GFX section
- ✓ Touch pad section
- ✓ Camera section
- ✓ SSD section
- ✓ GFX Section



➤ ASSEMBLING & DISASSEMBLING

- ✓ Desktop Assembling and disassembling (For Fresher Students)
- ✓ Laptop Assembling and Disassembling process

➤ SMPS Repairing

- ✓ How to check SMPS on and off condition?
- ✓ How to check SMPS all voltage supply track?
- ✓ How to check and repair 3.3v,5v,12v, -12v, SB 5v, PG 5v, PS 5volt
- ✓ SMPS problems repair
 - SMPS dead condition repair
 - SMPS power drop problem
 - SMPS restarting problem
 - SMPS suddenly power off problem



➤ Adaptor / Charger Repairing

- ✓ How to check adaptor on and off condition?
- ✓ How to repair dead condition laptop adaptor?
- ✓ How to check adaptor high low voltage problem?
- ✓ How to check adaptor shorting problem?

➤ Faults Finding and Onboard Solution

- ✓ No display problem solution
- ✓ Dead motherboard problem solution
- ✓ Automatic Restarting error repairing
- ✓ Hanging problem of laptop and desktop
- ✓ Charging & discharging faults of laptops
- ✓ Dim screen faults solution
- ✓ Automatic off problem & Blue screen
- ✓ Date and time error
- ✓ Heating faults of laptop and desktop
- ✓ Fan not working faults of laptop and computer
- ✓ Motherboard Shorting faults
- ✓ Linkage problem & USB not working faults
- ✓ Hard disk not working
- ✓ Error from Webcam (camera)
- ✓ Wi-Fi not working problem
- ✓ Sound related faults solution
- ✓ Network related problem
- ✓ Laptop Touch pad not working
- ✓ Keyboard not working faults of laptop and desktop

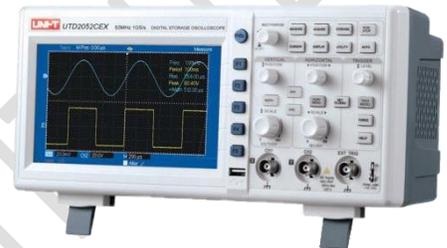


- ✓ Bluetooth and card reader problem
- ✓ White screen faults of laptops
- ✓ Hinge repair of laptops
- ✓ On/off switch related faults
- ✓ BIOS password removing method



➤ Schematic Diagram Concept of Motherboard

- ✓ Desktop block Diagram of Motherboard
- ✓ Laptop block Diagram of motherboard
- ✓ Difference Between Laptop & Desktop Block Diagram
- ✓ How to download schematic from different website?
- ✓ How to read schematic?
- ✓ How to read board viewer software?



➤ Advance Level Repairing with Machine

- ✓ **BGA MACHINE:** How to work on BGA machine for Chip Re-balling (Graphic chip, PCH chip, North bridge chip, South bridge chip)
- ✓ **BIOS PROGRAMMER:** How to use BIOS programmer for reprogramming Laptop bios chip, Desktop bios chip, Lcd, Led TV Bios chips.
- ✓ **CRO/DSO MACHINE:** How to use CRO Machine for checking all signal on motherboard like reset signal, clock signal, bios signal and frequency?
- ✓ **DC MACHINE:** How to check various voltage from DC Power Supply machine?
- ✓ **DIAGNOSTIC CARD:** How to check motherboard problems using diagnostic card?
- ✓ **I/O PROGRAMMER:** How to Reprogram I/o chip with ENIT I/O PROGRAMMER
- ✓ **SMD TESTER:** How to check all electronics components with SMD TESTER
- ✓ **MICROSCOPRE:** How to track and repair motherboard using microscope
- ✓ **ENIT MO METER:** How can remove shorting with ENIT MO METER

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