



NOAHTECH COMPUTER

REPAIRING AND SERVICES

NO: 3A-1, JALAN CEMPAKA SD 12/2, BANDAR SRI DAMANSARA,
52200 KUALA LUMPUR.
TEL: 03-62778522 / 62778523 FAX: 03-62778521

Laptop Troubleshooting And Repair

Topics Covered

Course Code LTR01
Course Length: 3 days

Day 1

9.00am – 9.45am	Refresh Of Basic Electronics Course (how to test electronic components using the right meters)
9.45am-11.00am	Introduction -Different between Desktop & Laptop. *Advantage and disadvantage of laptop. Dis-assemble and Re-assemble Laptop. Understanding Laptop Block Diagram
11.00am – 11.15am	Tea Break
11.00am – 1.00pm	How Laptop Power Adapter Works, How to Read Laptop Power Adapter Schematic Diagram, How To Find Replacement Components in SMPS, How To Use DC Ammeter and Light Bulb to Troubleshoot SMPS, How To Perform Voltage Testing On Laptop Adapter (Incoming voltage, supply voltage to power IC and outgoing voltage)
1.00pm- 2.00pm	Lunch Break
2.00pm- 3.30pm	Understand each function of Laptop Motherboard circuits with the help of a Universal Laptop Schematic Diagram (Ram Memory , Bios, Audio Chips, Keyboard, LCD screen, Crystal, Backlight, Inverter, Main Battery, CMOS Battery/RTC chip, Cooling fan, clock generator, CPU processor, CPU Temperature control, Modem, Power switch, Speaker, North Bridge Chip, Graphic Chips, South bridge Chips, IO Chips, Ethernet chips, PC Card chips, Power Jack, PC Card Power Supply Chips, Main power supply chips(5V,3V), Secondary power supply chips to different chips vcc core, 5vsus, +1.5v, 1.8vsus, 5v, 10v, 2.5v (Motherboard Voltage Regulator Circuit) , Discharge chips, COM/USB/HDMI/Parallel Port Chips and other common chipset

3.30pm-3.45pm	Tea Break
3.45pm-4.30pm	Continue with Understanding each function of Laptop Motherboard circuit
4.30pm-5.00pm	Questions and Answers

Day 2

9.00am- 9.30am	How to use EEPROM/Flash Rom Programmer to program EEPROM/Flash Rom IC
9.30am- 10.15am	Repair or Replace/Modify mismatch inverter board for Laptops. Test Inverter input output Voltage
10.15am-10.45am	How to Replace LCD screen/backlight/Hinges
10.45am-11.00am	Tea Break
11.00am- 11.15am	How To Replace/repair keyboard
11.15am- 12.15pm	How To Replace Motherboard/ Remove Laptop Bios password/How to Fix DC Power Jack/How To Bypass Windows Logon Password/ Check faults due to software (OS and Drivers installation)
12.15pm-12.30pm	How to test CMOS/Main battery if it is good or bad.
12.30pm-1.00pm	How to replace Harddisk, Ram, Processor,Dvdw, Bluetooth, Wifi and etc
1.00pm-2.00pm	Lunch Break
2.00pm- 3.30pm	How To Use A Rework Station to remove SMD components from Laptop motherboard and how to reflow and troubleshoot the Graphic (Nvidia) and other chips.
3.30pm-3.45pm	Tea Break

3.45pm-4.45pm	How To Read SMD Components Coding, How to use Smart Tweezer tester and other recommended tools and meters to check on SMD components, How To Find Replacement/substitution part number for SMD components
4.45pm- 5.00pm	Questions and Answers

Day 3

9.00am- 9.45am	Understanding Oscilloscope
9.45am- 10.45am	How To Use Oscilloscope To Perform Troubleshooting on Power Supply (power adapter) and Laptop Motherboard, How To Perform Voltage Testing On Mainboard
10.45am-11.00am	Tea Break
11.00am- 11.30am	How To Use Coolant and Hair Dryer To Locate Intermittent Faults In Power supply and Mainboard.
11.30am- 12.00pm	How to use Huntron Tracker to locate faulty components in Mainboard.
12.00pm-12.30pm	How To Trace Shorted Components In A Mainboard with the help of Digital DC power supply regulator
12.30pm-1.00pm	How to use Laptop Post Card To find bad section in Laptop Motherboard
1.00pm-2.00pm	Lunch Break
2.00pm-2.30pm	Discussion of common Laptop problems and solutions and where to buy Laptop spare parts and electronic components for replacement/ Perform Preventive Maintenance for Laptops
2.30pm- 3.30pm	Troubleshooting and repairing real problems in Laptop like no display, Overheating, No power, Power blinking, display shutdown, Display problem, password problem, bad charging circuit and etc. This is a step by step guide in tracing & identifying bad Laptop section and components
3.30pm -3.45pm	Tea Break

3.45pm-4.45pm	Continue with the troubleshooting and repairing of real problems in Laptop
4.45pm- 5.00pm	Questions/Answers and Presentation Certificate of Attendance

For more information please contact us at

<http://www.noahtechronicstraining.com/contact-us>