COMPUTER REPAIR TRAINING COURSE MATERIAL

MODULES	COURSES	REGULAR 1.5 HRS	FAST 3 HRS	FULL DAY 6 HRS
MODULE C1	COMPUTER SERVICE TRAINING (CARD LEVEL SERVICES)	1 Month	15 Days	4 Days
MODULE E1	BASIC ELECTRONICS	15 Days	7 Days	2 Days
MODULE C2	SMPS, LCD REPAIRING (CHIP LEVEL TRAINING)	15 Days	8 Days	2 Days
MODULE C3	COMPUTER BOARD REPAIRING (CHIP LEVEL TRAINING)	1 Month	15 Days	4 Days

Terms & Condition:-

⇒ **Registration Fees 1000/- Extra On Any Course**

⇒ **Reserve Seat before class and take online class**

⇒ **Course content, Fees & chapter may be change without prior notice**

MODULE C1:

COMPUTER BASIC HARDWARE (for freshers)

1   Basics Of Electronics (AC,dc, volt ampear, multemeter used, measurement)

2   Fundamentals Of Computer(Defination,generation, classification, anatomy, input, output)

3   Computer Assemble & Parts Identify (smps, cabinet, board, storage, cpu , board   )

4   Smps (types, pindetail, 12v, 5v, 3.3v pson, pgood, standby)

5   Motherboard & Cpu (types, block diagram, chip identify, north, south , io, lan, vga, agp etc   )

6   Hard Disk & Cd/Dvd (SATA, PATA, size type, internal parts, spindle, motor , head ,vcm   )

7   Monitor /Lcd /Led (working idea of lcd, basic problems of lcd, moniter)

8   Ram : (types of RAM , DDR1, DDR2, DDR3 , DDR4 , different volt   )

9   Printer Basic Ideas: (Types , DMP, LASER, INKJET, ALLINONE , changing cartrage)

10 Types Of Cards (agp, graphics,, lan, vga , usb   )

11 Basic Operating System: (types, single , multi user, booting process, bios setting,   )

12 Installing Os & Drivers(format , windows installation, driver installation)

13 Windows Operating Systems (basic used, device manager, control panel, dos cmd, config   )

14 Virus, Antivirus, Internet, Settings (antivirus software, internet connection, use of internet)

15 Troubleshooting Of Computers (msconfig, repair, NTLR missing, file missing)

16 Basic Networking Concept: (types of network ,cabling, cripting, ip address, subnetting, sharting files, printer)

MODULE E1:

BASIC ELECTRONICS ANALOG, DIGITAL, PRACTICE

1. AC, DC, Electronics, (Electrical, Current, Voltage, Watt, Ampere, Types Of Circuit, Measure.)
2. Types of Material, Working Detail of Circuit, Different Components.
3. Resistor: Types, Uses, SMD, Measure, Value.

4. Capacitor: Work, Types, Ceramic, Electrolyte, Tentalium
5. Induction / Coil: Work, Types, Check.
6. Transformer: Work, Types, Step Up, Step Down, SMD, Checks.
7. Diode: Semiconductor, N Type, P Type, Work, Types, Testing.
8. Transistor: Work, Types, NPN, PNP, Testing Method, Uses.
9. FET, MOSFET: Work, Types, NPN, PNP, Testing, Single Channel, Dual Channel, Testing, Uses.
10. Other Components: Fuse, Crystal, RTC.
11. Digital Electronics, Types of Number Systems, Conversion.
12. Types Of Logic Gate: AND, OR NOT NOR, NAND, Flip Flop, Exclusive.
13. Study of Different Chip Datasheet with Different Gates and Working Idea of Different Chips.
14. Soldering, Removing, Cold Testing, Warm Testing, Procedure of Components.
15. Project on Electronics, practical Idea of Using Different Components. Resistor, Capacitor Diode Transistor, MOSET, Fuse, Coil, Led, Switch etc.
16. Soldering and Desoldering Practice

MODULE C2 :

SMPS, LCD, LED REPAIRING CONCEPT

1. SMPS repairing
2. Lcd , inverter repairing concept
3. Hard disk basic troubleshooting
4. Ram basic service
5. Dvd rom Basic service

MODULE C3 :

COMPUTER DEKSTOP BOARD REPAIRING TRAINING CONCEPT

MODULE 3.1 : WORKING FUNCTION OF DIFFERENT CHIP AND MAIN SIGNAL TRACING

1. Basic computer & Block diagrams of computer motherboards, frame structure
2. Basic working detail of computer motherboards, power on signals
3. SMPS basic working and different volt , pson, pgood, sus, 12v, 5v, 3.3v vrm
4. MOSFETS & coil used, switching and linear output
5. Testing & understand vrm section offline and online with multimeter & cro
6. Understand Power on sequence of computer motherboard (K8V-MX)
7. Clock generator chip, Clock crystal, different frequency , voltage x1, x2,
8. Types of CPU socket and CPU, main signals of CPU(vid, vcccore, shdn, vron)
   a. VRM section detail with different phase for CPU
9. Northbridge working concept, main signals, different power
   a. RAM , Types, main signals , linear output , voltage,
   b. VGA display connector
   c. AGP slot

     d.   Graphic chip
10. South bridge working concept, main signals, different power
     a.   Hard disk, CD ROM connection, important signals
     b.   fdd connector
     c.   USB connector
     d.   sata connector
     e.   pci slot
     f.   bios chip ,main pins detail , identify, cmos battery
     g.   RTC, clock crystal,
     h.   PCI / ISA details pin out, important signals detail
11. LAN and audio chip, main signals, connection with socket
12. I/O controller working concept, main signals, different power
     a.   Com port
     b.   Ps2 connection
     c.   Printer port connection
     d.   Cpu temperature
     e.   Power controller , on/off , vrmon, etc
     f.   fan controller
13. PCI express /mini pci AGP slot, Testing signals on pci agp slots

⇒ **MODULE 3.2:   MOTHERBOARD FAULT FINDING**
14. Common fault chart and solution steps of computer motherboard
15. Repairing steps of motherboard identify problems
16. Debug card details, use of Debug card ,common error code
17. Testing with multimeter, CRO different signals of motherboard

    * pson, power good, 12v, 5v, 3.3v, 2.5v 1.5v 1.8v, 5vsus, reset signals, vid signals, rtc crystal, cmos battery, clock crystal, address, data buses, bios chip,

18. Slot tester and use details, cpu, ram, pci, agp
19. Reset signals detail , testing reset signals
20. Bios update

⇒ **MODULE 3.3:   BGA REPAIRING AND REBALLING**
21. Washing, Cleaning, drying, Dry solder problem solution of motherboard
22. Introduction to BGA machines, used, temperature setting,
23. ICs rebelling, BGA ball arrangement, practice., Using BGA machine
24. Removing and inserting different chips practice   (video & step)
25. Removing & replacing sockets , CPU , RAM, PS2, COM ETC
26. DEMO FOR OTHER PRODUCTS AVAILABLE

CONTACT

WWW.INTERSOFTINSTITUTE.COM

Skype-id: intersoft05

Email-id: intersoft05@hotmail.com

M.no: +91-9824144698

+91-9824044699

Address: BU-3, Pooja Arcade, Motiwala Perfume Lane Bhagatalav Main Road, Nanavat, Gujarat

Surat- 395003