

## Course Contents

### MODULE -I

#### Section (A)

##### Laptop Repairing related Theory,

- Basic Electronics
- Digital Electronics and component
- Power Supply and Filters and related component chip
- CPU Power Supply chip
- Charge Discharge Control Chip
- CPU temperature control chip
- Graphics Brand, Ethernet chip
- I/O chip, Sound audio chip, PC card chip, Battery IC, Clock IC,
- COM port chip keyboard chip
- Memory control chip
- LCD Backlight control
- DDR memory Power supply
- Crystal (14.318 clock)
- How to read different component datasheet

### MODULE-II

#### Troubleshooting of Laptop

- Fault Finding and troubleshooting of Motherboard
- Tracing different connector's and socket with related component and chip
- Testing and using of different component
- DC to DC power regulator section
- Power Supply to different chips VCC CORE, 5VSUS, +1.05, 1.8VSUS, .+9V, +3.3V,2.5V

- CPU Core voltage, vid signals , VRM section, MOSFET of VRM
- Clock generation circuits
- BIOS Chip section, RTC chip
- Power good ,Reset, Frame ,Clock, BIOS signals
- Fault finding and troubleshooting.
- Basic cleaning and washing method of motherboard
- SMD Component practice removal and inserting different component

### MODULE-III

#### Equipment/tools used for Laptop Repairs And Software part

- LAPTOP Motherboard Voltage regulator ckt.
- HDD repair, and how and image appears on the LCD screen
- How I installed external Bluetooth adapter inside a laptop
- How to fix failed NVIDIA chip
- How to fix hardware problem without taking apart the Laptop
- How to replace battery cells inside laptop battery
- How to test a laptop or a desktop computer memory
- Installations different OS
- Installations drivers and application software ,
- Data recovery inside pen drive and HDD, and external drive
- Data recovery inside pen drive and HDD,

- Wi-Fi installation and troubleshooting
- Virus removing and antivirus installation

### **Evaluation**

For evaluation of performance, 01 Theory and 01 Practical examination will be conducted and grades will be given on the basis of marks obtained.

### **Expected Outcome**

- This being a job-oriented course, future prospects are there for the candidates.
- For those who want to develop their career in this field, the course contents and the training gives significant inputs and skills to the students.

### **Eligibility**

X<sup>th</sup> + 2, ITI, Diploma, Degree,

### **Course Fee**

Rs. 6,000/- per candidate  
(Inclusive of course material)

### **Duration**

120 hours  
(TH -40 Hrs / PR 80 Hrs i.e. 03 Months)

### **Timings**

Morning : 7:30 am. To 9:30 am.  
Evening : 6:00 pm. To 8:00 pm

## Profile of Government Polytechnic

Government Polytechnic, Nagpur is one of the prime Institutions of Government of Maharashtra established in 1914. This Institute imparts technical education at Diploma and Post Diploma levels and is well known for its excellence at State level and National level. Institute has been accredited by National Board of Accreditation, New Delhi.

## Profile of HARDPRO Institute of Information Technology

Established in 1994, Mr. Bhupendra G. Ukinker is the proprietor of the aforesaid firm. Under this banner, we have trained more than 400 students till date and the response to the course is growing day by day. In our training program, we train students / professionals/personnel's to troubleshoot real life day-to-day field oriented practical problems. It has been observed that the students trained under this banner at Government Polytechnic have been serving as a Hardware Technician, Hardware Engineer at Nagpur and also outside. Apart from this, many of them are running their own Computer Sales and Service centres at Nagpur and outside and earning a handsome income.

We train students not only for just hardware but also give marketing guidelines to the students for their betterment.

We believe that if you have firm determination and presence of mind during the course, the pleasure of joining the course is yours.

## Future Prospects

We look to the fact that after successful completion of this course by the students, he/she would be able to...

- Assemble UPS, Monitor
- Troubleshoot a UPS, Monitor & Printer

The course being job oriented, there are more prospects for the right candidate. We do not take credit for the jobs that students would be getting after completing this course. You can confirm this from the number of students who are working at Nagpur and outside. If doing course has helped the students in their interview, the pleasure of running the course is ours.

## Faculty

### Mr. Bhupendra G. Ukinker

- Have more than 20 years experience of component level repairing & maintenance.

### Infrastructure

Well-equipped laboratories, with a range of different Laptop and Screen displays.

### For further details, please contact -

**Prof. K. L. Meshram (in charge CED)**

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## GOVERNMENT POLYTECHNIC

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Presents

Continuing Education Program

Career Oriented  
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in  
Computer Laptop Service  
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IN  
COLLABORATION WITH

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