

#### **SRI SAIRAM ENGINEERING COLLEGE** New Technology-Mobile Service and Training Institute, Coimbatore

## Value added Hands on training on

### **Chip Level Training and Debugging for Smart Phones**

New Technology in Coimbatore is one of the leading businesses in the Laptop Servicing Institutes. Also known as Institutes for Mobile Phone Servicing, Laptop Servicing Institutes, Laptop Chip Level Training Institutes, Online Chip Level Training for Mobile Phone Repair, Chip Level Mobile Phone Training Institutes and much more. Established in the year 2000, New Technology in Singanallur, Coimbatore is a top player in the category Laptop Servicing Institutes in Coimbatore. This business employs individuals that are dedicated towards their respective roles and put in a lot of effort to achieve the common vision and larger goals of the company. In the near future, this business aims to expand its line of products and services and cater to a larger client base

#### **Course Duration: 15 Hrs (Theory, Practical, Additional Practice)**

#### **Course contents:**

The first module will act as a bridging course for those students who do not have any prior knowledge about the field. For others, who already have prior knowledge about electrical and electronic engineering, this module will help them revise these concepts. The second module will focus on hardware and teach the students how to handle and replace various electronic parts which will help them to learn all the hardware repair procedures in a more comprehensive manner.

Software problems are some of the most common ones faced by smartphone users. Sometimes, a software problem can lead to hardware abnormalities as well. This module will teach how to perform various software repairing techniques. On receiving a customer's complaint, it is important to understand where the problem of the phone lies - hardware or software; and then repair it accordingly. This is where the troubleshooting module will come in handy. The training will teach how to troubleshoot the problems in a mobile phone almost like an experienced mobile phone repair technician. To be a successful mobile phone repair technician, one needs to know more than just the technical aspects of fixing a phone. This module aims to teach some additional topics to help you perform better mobile phone servicing.



DAY / SESSIONS	DAY 1	DAY 2
04.03.24 SESSION 1	Basics of mobile communicationStudy of Digital Electronics-Assembling and disassembling of various models of mobile phones.	Detailed study of various faults arising due to corrupt software-Introduction of various flasher boxes and software-Flashing of various brands of handsets.
04.03.24 SESSION 2	Study of various tools and equipment used in mobile phone repairsStudy of parts inside a mobile phoneUsing a multimeterUse of DC Power Supply.	Removing virus from infected phones-Unlocking of handsets through codes and/or software-Use of various secret codes.
05.03.24 SESSION 3	Introduction and study of Printed Circuit Board (Motherboard)-Details of various components on the PCB-Testing of various parts and components-Study of different ICs (chips) used on the motherboard-How to recognize various ICs.	Fault finding, troubleshooting and repairing of various faults-Common repair procedure for hardware related faults-Common repair procedure for software related faults-Water damaged repair techniques.
05.03.24 SESSION 4	Soldering & desoldering of components by using a soldering iron-Soldering & desoldering of components by using a rework station-Reheating and mounting of various BGA and SMD chips- Ultrasonic cleaning procedure.	Troubleshooting through schematic diagrams-Use of

## Value added course on "Chip Level Training and Debugging for Smart Phones"

## During Inauguration of Training programme





# During training and testing of smartphone











# During Certificate distribution





#### **OUTCOME** of the course:

Online Course feedback collected from the students and analysis reveals that the knowledge gained and certificate of this course plays a vital role for understanding the hardware and software parts of the smartphone. Students now have the ability to work on industry projects that expose them to industry-centric processes. Students also enrich their knowledge and skills in developing various solutions for solving engineering problems in the society. The students have learned mobile hardware repair procedures in a more comprehensive manner and also the training was given to perform various software repairing techniques. At the end of the course the student gained the ability to troubleshoot problems in a mobile phone almost like an experienced mobile phone repair technician and this provides confidence to become an entrepreneur.

The students who participated brought their phone to be serviced, gained knowledge in chip level mobile hardware and software techniques, identified the problem and corrected it.



Feedback from 52 students on a 5 point scale

Rate this Programme in a 5 point scale.