

SYLLABUS
Mobile Phone Hardware Repair Technician

Level Code: L4

Course Code: EL/S/L4/C049

Vertical Name: Consumer Electronics

Course Name: 2.1.5 Mobile Phone hardware Repair Technician (ESSCI)

Objective of the Course:

Mobile Phone Hardware Repair Technician:

The Smartphone Repair Technician diagnoses problems and repairs the faulty module of the smartphone.

Brief Job Description: The individual at work is responsible for rectifying faults in the smartphone brought in by the customer. The individual receives the faulty smartphone, diagnoses the problems, performs front end or hardware level repair as required, resolves software issues and ensures effective functioning before delivering back to customer.

Personal Attributes: The job requires the individual to have: attention to details, patience, ability to listen, steady hands, logical thinking and customer orientation. The individual must work on desk with different types of equipment.

Learning Outcomes:

NOS # ELE/N8106 Interact with customer and perform front end repair

1. Engage with the customer
2. Understand the complaint
3. Check for terms and conditions of using system
4. Perform front end repair
5. Interact with supervisor or superior and achieve targets

NOS # ELE/N8107 Repair and rectify the faults in smartphone

1. Follow standard repair procedures and avoid damage
2. Diagnose the problem in the smartphone
3. Decide on the type of repairs to be performed
4. Assemble or disassemble the smartphone as per repair required
5. Replace or repair the faulty module
6. Fix the software malfunction
7. Document the repair process
8. Seek assistance from superior as necessary
9. Report and document work status and achieve productivity target

NOS # ELE/N9951 Interact with other employees

10. 1 Interact with supervisor or superior
11. 2 Coordinate with colleagues

NOS # ELE/N9910 Maintain safe and secure work environment

1. Follow standard safety procedures while handling an equipment
2. Participate in company's safety drills and workshops

Expected Job Roles:

Mobile Phone Hardware Repair Technician

Duration of the Course (in hours)

350 Hrs.

Minimum Eligibility Criteria and pre-requisites, if any

ITI/12th Pass

Professional Knowledge:**NOS # ELE/N5901 Check site conditions, collect tools and raw materials**

KA1. company's policies on: incentives, delivery standards, and personnel management

KA2. company's sales and after sales support policy

KA3. importance of the individual's role in the workflow

KA4. reporting structure

KA5. company's policy on product's warranty and other terms and conditions

KA6. company's line of business and product portfolio

KA7. company's service level agreement (SLA) with the brand

KB1. basic electronics involved in the hardware

KB2. operate various models of smartphone

KB3. features of smartphone and their purpose

KB4. different types of smartphone and their model specifications

KB5. how to document the spares movement note and capture all the action performed

KB6. different accessories available for smartphones and their purpose

KB7. software and applications related to smartphone

KB8. procedures of replacing accessories such as battery, SD card

KB9. software and applications available in the smartphone market ,their usage and purpose

KB10. licensed and authorised software compatible for smartphones and the downloading procedure

KB11. specifications of accessories such as chargers, battery

KB12. service level agreement with the brand on parameters such as turn around time (TAT), repair

procedure, warranty

KB13. company's ERP system and operational procedure

KB14. safety rules, policies and procedures

KB15. quality standards to be followed

NOS # ELE/N8107 Repair and rectify the faults in smartphone

KA1. company's policies on: incentives, delivery standards, and personnel management

KA2. company's after sales support policy

KA3. importance of the individual's role in the workflow

KA4. reporting structure

KA5. company's policy on product's warranty and other terms and conditions

KA6. company's line of business and product portfolio

KA7. company's repair and stores policy

KA8. documentation procedure followed in the company

KA9. company's policy on repair time, turnaround time, production targets, working hours

KB1. basic electronics involved in the hardware

- KB2. operations of different models of smartphone
- KB3. features of smartphone and their purpose
- KB4. different types of smartphone and their model specifications
- KB5. new product specifications and their spares and repair details
- KB6. how to document the spares movement note and capture activity performed
- KB7. software and applications related to smartphone
- KB8. assembling and disassembling smartphone
- KB9. handling procedure of display systems in smartphone (LCD and LED)
- KB10. frequently encountered problems in smartphone and their repair procedures
- KB11. terminologies and procedures mentioned in repair manual
- KB12. softwares and operating system related to smartphone
- KB13. applications including games that can be installed in smartphone and the authentic source to download them
- KB14. licensed versions of software and application, its terms and conditions associated with it
- KB15. different types of soldering techniques such as surface mount, through hole
- KB16. basic electronic repairing and reworking such as desoldering, soldering, removal and fixing components
- KB17. usage of tools such as electric screwdrivers, multimeter, soldering station, hot air blower, BGA workstation
- KB18. estimate cost of repair and verify Beyond Economic Repair (BER) value
- KB19. service level agreement (SLA) and conditions associated with it
- KB20. Electrostatic Discharge (ESD), its purpose and precautionary measures to be taken
- KB21. process system such as 5S
- KB22. documentation procedure to record customer, smartphone and repair details
- KB23. check and test various electronic components on their functionality
- KB24. quality standards to be followed
- KB25. implementation process for Engineering Change Order (ECO)

ELE/N9952 Coordinate with colleagues at work

- KA1. company's policies on: incentives, delivery standards, and personnel management
- KA2. importance of the individual's role in the workflow
- KA3. reporting structure
- KB1. how to communicate effectively
- KB2. how to build team coordination

ELE/N9953 Ensure safety at workplace

- KA1. company's policies on: incentives, delivery standards, and personnel management
- KA2. company occupational safety and health policy followed
- KA3. company emergency evacuation procedure
- KA4. company's medical policy
- KB1. how to maintain the work area safe and secure
- KB2. how to handle hazardous material
- KB3. how to operate hazardous tools and equipment

KB4. emergency procedures to be followed such as fire accidents, etc.

Professional Skill:

- i. Interpersonal skills
- ii. Behavioural skills
- iii. Reflective thinking
- iv. Critical Thinking
- v. Decision Making
- vi. Using tools and machines

Core Skill:

- 1. Using tools and machines
- 2. Reading, writing and computer skills
- 3. Teamwork and multitasking
- 4. Communication skills

Detailed Syllabus of Course

S.No.	Module. Name	Duration
	Interact with customer and perform front end repair	
	Repair and rectify the faults in smart phone	
	Interact with other employees	
	Maintain safe and secure work environment	
Total Theory/Lecture		150 Hrs
Total Practical / Tutorial Hours		200 Hrs
Total Hours		350 Hrs