

## Repair and Maintenance of Washing Machine and Microwave oven

**NAME** : Repair and Maintenance of Washing Machine and Microwave oven

**SECTOR** : Electronics

**CODE** : ELC204

**DURATION** : 60 Hrs.

**Entry qualification:** :8th std pass with age at least 14 years.  
MES Modules on Basic Electronics -Repair and Maintenance of Power supply, Inverter and UPS

**TERMINAL COMPETENCY** :

After completion the participant would be able to install and repair washing machine and microwave oven.

**CONTENTS** :

Practical Competencies	Underpinning Knowledge (Theory)
<i>Practice procedures for safety and health hazards measures</i>	<ul style="list-style-type: none"> <li>• <i>Electrical and personal safety, dangers and preventions</i></li> </ul>
<p><b>Washing machine</b> – front load &amp; top load. Installation of washing machine</p> <p>Identify the internal and external parts of washing machine Operate semi, automatic and fully automatic , fuzzy logic, neorologic washing machines Rectify the fault leading to not working of control panel switches</p>	<ul style="list-style-type: none"> <li>• Understand the functions of washing machine through block diagram</li> <li>• Working principle of motors used in washing machine and their wiring diagram</li> <li>• Study of inlet and outlet valves and their control</li> </ul>
Rectify the fault leading to not working of pulsator / agitator	
Rectify the fault leading to spin drier not working	
Rectify the fault leading to one side rotation of motor	
Rectify the fault leading to water inlet and outlet valves. Maintenance and precautions (types of detergents)	

<p><b>Microwave oven</b> Types – with grill, without grill and conventional Identify the internal and external parts of micro wave oven</p>	<ul style="list-style-type: none"> <li>• Understand the working principle of micro wave oven with the help of block diagram and by observation.,</li> </ul>
<p>Identify the different touch pad controls their functions, testing of high voltage diode</p>	
<p>Identify the HV capacitor and discharge it</p>	
<p>Rectify the fault leading to fuse blows off when cooking is initiated</p>	
<p>Rectify the fault leading to not responding of touch switches.( front panel ) Rectify the fault leading to Dead set</p>	
<p>Rectify the fault leading to long cooking time . Precautions – importance of interlocking switch in performing maintenance</p>	

**RESOURCES:**

Maintenance tool kit  
Washing machine of different makes  
Micro wave oven of different types  
Spares for micro wave oven  
Digital multimeter  
Technicians tool kit  
Hand glove  
Radiation leakage tester