



**Gwani Software**



**TRAINING DEPARTMENT**  
***(Knowledge & Expertise)***

**System Software Core Curriculum**

**December 2011**

© Gwani Software Ltd, 2011.

All rights reserved.

### **Disclaimer**

- Windows is a trademark of Microsoft Corporation,
- Red Hat is a trademark of Red Hat Inc.,
- And any other trademark belongs to its rightful owner.

### **Warning**

This document is an exclusive property of Gwani Software Ltd, permission is granted to print and copy this document by trainees, instructors, supervisors and affiliated academies of Gwani Software likewise for non-commercial distribution by anyone.

With the exception of the above permission, no part of this document may be printed, copied, modified or used by anyone without a prior written permission is obtained from Gwani Software. Contravening this provision may lead to legal proceeding in a court of law.

### **Proposed by**

Abubakar Muhammad

[fageer@gwanissoftware.com](mailto:fageer@gwanissoftware.com)

### **Approved for usage by**

Al-Ameen Abubakar, Director Training, this 5<sup>th</sup> day of Muharram, 1433  
equivalent to

1/12/2011.

## **Gwani Software**

### **TRAINING DEPARTMENT**

#### **System software core**

**General Description:** - This course is intended to give the trainee the basic understanding of operating system, antivirus and operating system errors.

**Aims:** - the aims of this course are:

1. To introduce windows operating system to the trainee. Its Installation using four methods.
2. To Introduce Linux operating system to the trainee, its Installation using live CD.
3. To drill the trainee on Installation and usage of antivirus
4. To drill the trainee on windows error messages and codes.

**Objective:** - The trainee at the end of the training session should be able to;

- Install windows operating system using clean Install, upgrade or multi boot option.
- Run Linux live CD and Install the operating system on a system.
- Install and use antivirus on a system.
- Read and understand windows error messages.

**Target Audience:** - This course should be taken by system Engineer, PC maintenance Staff, system software designer, windows users, operators and Engineers, Linux users, operators and Engineers, users of antivirus and IT Officers;

**Pre-requisite:** - Desktop maintenance & repairs, laptop maintenance & repairs are pre-requisite to this course. Knowledge of operating system and virus awareness are added advantage.

**Approximate Duration:** - The course requires four weeks of class sessions with practical.

**Method of Assessment:** - Trainee is to be assessed with examination on lessons covered.

**Methodology:** - The class takes a lesson discusses it and proceeds to conduct practical on it, then takes the next lesson until all the lessons are exhausted.

**Recommended Resource Materials:** - The following materials are recommended for the trainee's study;

1. Windows Error Codes (MS-ERREF).
2. Sustainable computing, 'Sleep or Hibernate'.

**System Software Core**

<b>Week one</b>	<p><b>Windows operating system:</b> Windows history, minimum system requirements for windows XP, Vista and windows 7, recommended system requirements of windows XP, Vista and windows 7, optimal system requirements of windows XP, Vista &amp; window 7.</p> <p>Windows Installation: - clean Install, upgrade, multi boot, and virtualization.</p> <p><b>Practical work:</b> - Installation of windows (XP, Vista or windows 7) using any of the four methods.</p>
<b>Week two</b>	<p><b>Linux Operating system:</b> - Brief; Linux genesis, Professor Linux's works on operating system, Linux flavors not restricted to, but include ubuntu, red hat, fedora, mandriva, Linux mint, suise, debian etc.</p> <p>Minimum system requirement of red hat, Ubuntu and fedora, recommended system requirement of red hat, Ubuntu and Fedora, optimal system requirement of red hat, Ubuntu and fedora.</p> <p><b>Practical work:</b> - Installation of Linux (red hat, Ubuntu or Fedora).</p>
<b>Week three</b>	<p><b>Antivirus:</b> - Brief; Definition of viruses, characteristic of viruses; reproduction lethally, attaching to host, triggering event. Common examples of viruses, Antivirus program, what makes a best antivirus, ten best antiviruses rating.</p> <p><b>Practical:</b> - Installing of antivirus and performing system scanning.</p>
<b>Week four</b>	<p><b>Operating system errors:</b> - Dead lock; - Definition, causes of deadlock, ending tasks, checking if there is deadlock.</p>

	<p>Error codes of windows (XP, Vista &amp; windows 7) list of error codes of and their meanings.</p>
--	--

**Practical:-** Boot sector repair of windows and running recovery program to restore system to factory setting.

Examination.

Gwani Software