COMPUTER TRAINING SYLLABUS
LEVELS 1 - 5

A PUBLICATION OF THE NIGER DELTA DEVELOPMENT COMMISSION, NDDC, PORT HARCOURT, RIVERS STATE
## BASIC COMPUTER APPRECIATION

<table>
<thead>
<tr>
<th>Level One</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Computers and Concepts</td>
<td>4 Hours</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Internet and Email</td>
<td>4 Hours</td>
</tr>
<tr>
<td>3</td>
<td>Basic Typing Skills</td>
<td>8 Hours</td>
</tr>
<tr>
<td>4</td>
<td>Microsoft Windows 2000 Basic or</td>
<td>8 Hours</td>
</tr>
<tr>
<td>5</td>
<td>Microsoft Windows XP Basic</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Introduction To Linux</td>
<td>16 Hours</td>
</tr>
<tr>
<td>7</td>
<td>Microsoft Word 2000 or</td>
<td>30 Hours</td>
</tr>
<tr>
<td>8</td>
<td>Microsoft Word XP</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Microsoft Excel 2000 or</td>
<td>30 Hours</td>
</tr>
<tr>
<td>10</td>
<td>Microsoft Excel XP</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Microsoft PowerPoint 2000 or</td>
<td>20 Hours</td>
</tr>
<tr>
<td>12</td>
<td>Microsoft PowerPoint XP</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Microsoft Access 2000 or</td>
<td>20 Hours</td>
</tr>
<tr>
<td>14</td>
<td>Microsoft Access XP</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Microsoft Outlook 2000 or</td>
<td>20 Hours</td>
</tr>
<tr>
<td>16</td>
<td>Microsoft Outlook XP</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL DURATION (12 Weeks):** 160 Hours
Introduction To Computers & Computer Concepts

Hardware
- Classification of Computers
- The PC Range
- Common Input Devices
- Common Output Devices
- Storage Media and Storage Devices
- Components of the System Unit
- Components attached to the Motherboard
- Display Adapters
- Computer Viruses
- Managing Hard Disks
- Managing Floppy Disks
- Compression Utilities
- Virtual Reality
- Troubleshooting

Software
- Application Software
- Compiler Software
- Operating System Software

Networks
- Networking
- Roles
- Types of Networks
- Communication Devices for Computers
- Network Topologies
- Protocols
- Network Media
- Wireless Media
- Local Area Networks
- Extended Local Area Networks
- Mobile Computing
- Internet
- Intranet

Introduction To Computers (Hands On)
- Working with Application on Windows & Linux
- Creating Folders
- Modifying the appearance of the Desktop
- Emptying the recycle Bin

TOTAL DURATION: 4 HOURS
Introduction To Internet & Email

- The Networks
- The Internet
- Communication Protocol
- Services available on the Internet
- The World Wide Web
- Web Terminology
- Web Browsers
- Accessing the Internet
- Browsing the Internet with Microsoft Internet Explorer

- E-mail
- Browse the Internet
- Send and receive mails

TOTAL DURATION : 4 HOURS

Basic Typing Skills

- Proper posture
- Which hand to use for different parts of the keyboard
- Position your hands on the HOME keys
- Which fingers to use for key stroking
- Learning the HOME keys
- Using the SPACE BAR
- Using the Enter key
- Using the Shift key to switch to UPPERCASE
- Using the SHIFT key to switch to SYMBOLS and SPECIAL CHARACTERS
- Strategies for improving your typing speed and accuracy
- How to use the numeric keypad
- Basics of Word Processing

TOTAL DURATION : 8 HOURS

LEVEL 1: BASIC COMPUTER APPRECIATION 2.1

LEVEL 1: BASIC COMPUTER APPRECIATION 3.1
Introduction to Linux

Communicating
• Chat using talk
• Send mail using pine
• Receive mail using pine

Over The
Intranet/Internet

Creating and
Maintaining
Documents
• Create Documents
• Edit Documents
• Copy Documents
• Move Documents
• Rename Documents
• Delete Documents

Automating
Tasks
• Create a single line Utility
• Customise the prompt
• Create a shell script
• Execute a shell script

Securing
Personal Files
and Folders
• Change password
• Grant permission for a file
• Revoke permission for a file
• Grant permission for a directory
• Revoke permission for a directory
• Lock workstation
• Apply screen saver protection

Scheduling
Routine
Activities
• Maintain appointments and reminders
• Maintain a schedule of activities

TOTAL DURATION : 8 HOURS

Microsoft Word 2000 - Core (.1)

Working with
Text
• Use the Undo, Redo, and Repeat commands
• Apply font formats (bold, italic and underline)
• Use the Spelling and Grammar command
• Use the Thesaurus
• Insert page breaks
• Highlight text in document
• Insert and move text
• Cut, copy, paste and paste special using the Office Clipboard
• Copy formats using the Format Painter
• Select and change font and font size
• Find and replace text
• Apply character effects (superscript, subscript, strikethrough, small caps, and outline)
• Insert date and time
• Insert symbols
• Create and apply frequently used text with AutoCorrect

Working with
Paragraphs
• Align text in paragraphs (center, left, right and justified)
• Add bullets and numbering
• Set character, line and paragraph spacing options
• Apply borders and shading to paragraphs
• Use indentation options (left, right, first line and hanging indent)
• Use Tabs command (center, decimal, left and right)
• Create an outline-style numbered list
• Set tabs with leaders
Microsoft Word 2000 - Core (.2)

Working with documents
- Print a document
- Use print preview
- Use Web Page Preview
- Navigate through a document
- Insert Page numbers
- Set Page orientation
- Set margins
- Use GoTo to locate specific elements in a document
- Create and modify page numbers
- Create and modify headers and footers
- Align text vertically
- Create and use newspaper columns
- Revise column structure
- Prepare and print envelopes and labels
- Apply styles
- Create sections with formatting that differs from other sections
- Use Click and Type
- Use save
- Locate and open an existing document
- Use Save As (different name, location, or format)
- Create a folder
- Create a new document using a Wizard
- Save as Web Page
- Use templates to create a new document
- Create Hyperlinks
- Use the Microsoft Office Assistant
- Send a Word document via e-mail
- Create and format tables
- Add borders and shading to tables
- Revise tables (insert and delete rows and columns and change cell formats)
- Modify table structure (merge cells, change height, and width)
- Rotate text in a table
- Use the drawing toolbar
- Insert graphics into a document (WordArt, clip art, and images)

Microsoft Word 2000 - Expert (.3)

Working with documents
- Apply paragraph and section shading
- Use text flow options (keeping lines together)
- Sort lists, paragraphs and tables
- Create and modify page borders
- Format first page differently than subsequent pages
- Use bookmarks
- Create and edit styles
- Create watermarks
- Use Find and replace with formats, special characters, and nonprinting elements
- Balance column length (using column breaks appropriately)
- Create or revise footnotes and endnotes
- Work with master documents and subdocuments
- Create and modify a table of contents
- Create cross reference
- Create and modify an index
- Embed worksheets in a table
- Perform calculations in a table
- Link Microsoft Excel data as a table
- Modify worksheets in a table
- Add bitmap graphics
- Delete and position graphics
- Create and modify charts
- Import data into charts
- Create main document
- Create data source
- Sort records to be merged
- Merge main document and data source
- Generate labels
- Merge a document using alternate data sources
Microsoft Word 2000 - Expert (..4)

Using Advanced Features

- Insert a field
- Create, apply and edit macros
- Copy, rename and delete macros
- Create and modify form
- Create and modify a form control (for example, add an item to a drop-down list)
- Use advanced text alignment features with graphics
- Customize toolbars

TOTAL DURATION: 30 HOURS

LEVEL 1: BASIC COMPUTER APPRECIATION 7.4

Microsoft Word XP - Core (..1)

Creating and Modifying Text

- Insert, modify, and move text and symbols
- Apply and modify text formats
- Correct spelling and grammar usage
- Apply font and text effects
- Enter and format Date and Time
- Apply character styles
- Modify paragraph formats
- Set and modify tabs
- Apply bullet, outline, and numbering format to paragraphs
- Apply paragraph styles
- Create and modify a header and footer
- Apply and modify column settings
- Modify document layout and Page Setup options
- Create and modify tables
- Preview and Print documents, envelopes, and labels
- Manage files and folders for documents
- Create documents using templates
- Save documents using different names and file formats
- Insert images and graphics
- Create and modify diagrams and charts
- Compare and Merge documents
- Insert, view and edit comments
- Convert documents into Web pages

LEVEL 1: BASIC COMPUTER APPRECIATION 8.1
Microsoft Word XP - Expert (.2)

- Control pagination
- Sort paragraphs in lists and tables
- Create and format document sections
- Create and apply character and paragraph styles
- Create and update document indexes and tables of contents, figures, and authorities
- Create cross-references
- Add and revise endnotes and footnotes
- Create and manage master documents and subdocuments
- Move within documents
- Create and modify forms using various form controls
- Create forms and prepare forms for distribution
- Use Excel data in tables
- Perform calculations in Word tables
- Create, modify, and position graphics
- Create and modify charts using data from other applications
- Align text and graphics
- Create, edit, and run macros
- Customize menus and toolbars
- Track, accept, and reject changes to documents
- Merge input from several reviewers
- Insert and modify hyperlinks to other documents and Web pages
- Create and edit Web documents in Word
- Create document versions
- Create documents
- Define and modify default file locations for workgroup templates
- Attach digital signatures to documents

TOTAL DURATION: 30 HOURS

Microsoft Excel 2000 - Core (.1)

- Use Undo and redo
- Clear cell content
- Enter text, dates and numbers
- Edit cell content
- Go to a specific cell
- Insert and delete selected cells
- Cut, copy, paste, paste special, and move selected cells
- Use the Office Clipboard
- Use Find and Replace
- Clear cell formats
- Work with series (Auto Fill)
- Create hyperlinks

- Use Save
- Use Save As (different name, location, and format)
- Locate and open an existing workbook
- Create a folder
- Use templates to create a new workbook
- Save a worksheet/workbook as a Web Page
- Send a workbook via e-mail
- Use the Microsoft Office Assistant

- Apply font styles (typeface, size, color, and styles)
- Apply number formats (currency, percent, dates, and commas)
- Modify row and column size
- Modify alignment of cell content
- Adjust decimal places
- Use the Format Painter
- Apply autoformat
- Apply cell borders and shading
- Merge cells
- Rotate text and change indents
- Define, apply, and remove a style
### Microsoft Excel 2000 - Core (.2)

- Preview and print worksheets and workbooks
- Use Web Page Preview
- Print a selection
- Change page orientation and scaling
- Set page margins and centering
- Insert and remove a page break
- Set print, and clear a print area
- Set up headers and footers
- Set print titles and options (gridlines, print quality, and headings for rows and columns)

- Insert and delete rows and columns
- Hide and unhide rows and columns
- Freeze and unfreeze rows and columns
- Change the zoom setting
- Move between worksheets in a workbook
- Check spelling
- Rename a worksheet
- Insert and delete worksheets
- Move and copy worksheets
- Link worksheets and consolidate data using 3-D references

- Enter a range within a formula in a drag-and-drop operation
- Enter formulas in a cell and use the formula bar
- Revise formulas
- Use references (absolute and relative)
- Use AutoSum
- Use the Paste Function to insert a function
- Use basic functions (AVERAGE, SUM, COUNT, MIN, and MAX)
- Enter functions using the formula Palette
- Use date functions (NOW and DATE)
- Use financial functions (FV and PMT)
- Use logical functions (IF)

- Preview and print charts
- Use the Chart Wizard to create a chart
- Modify charts
- Insert, move, and delete an object (graphic)
- Create and modify lines and objects

---

### Microsoft Excel 2000 - Expert (.3)

#### Importing and Exporting Data

- Import data from text files (insert, drag-and-drop) operations
- Import from other applications
- Import a table from an HTML file (insert and drag and drop operations, including HTML round tripping)
- Export to other applications

#### Using Templates

- Apply templates
- Edit templates
- Create templates

#### Using Multiple Workbooks

- Use a workspace
- Link workbooks

#### Formatting Numbers

- Apply number formats (accounting, currency, and number)
- Create custom number formats
- Use conditional formatting

#### Printing Workbooks

- Print and Preview multiple worksheets
- Use the Report Manager

#### Working with Named Ranges

- Add and delete a named range
- Use a named range in a formula
- Use Lookup Functions (Hlookup or Vlookup)

#### Working with Toolbars

- Hide and display toolbars
- Customize a toolbar
- Assign a macro to a command button
**Microsoft Word 2000 - Expert (.4)**

- Record macros
- Run macros
- Edit macros

**Auditing a Worksheet**
- Work with the Auditing Toolbar
- Trace errors (find and fix errors)
- Trace precedents (find cells referred to in a specific formula)
- Trace dependents (find formulas that refer to a specific cell)
- Apply conditional formats
- Perform single and multilevel sorts
- Use grouping and outlines
- Use data forms
- Use subtotaling
- Apply data filters
- Extract data
- Query databases
- Use data validation
- Use the Microsoft PivotTable® autoformat
- Use Goal Seek
- Create Microsoft PivotChart® reports
- Work with Scenarios
- Use Solver
- Use data analysis and PivotTable
- Create interactive tables for the Web with PivotTable
- Add fields to a table using the Web browser
- Create, edit, and remove a comment
- Apply and remove worksheet and workbook protection
- Change workbook properties
- Apply and remove file passwords
- Track changes (highlight, accept, and reject)
- Create a shared workbook
- Merge workbooks

**TOTAL DURATION : 30 HOURS**

**Microsoft Excel XP - Core (.1)**

**Working with Cells and Cell Data**
- Insert, delete and move cells
- Enter and edit cell data including text, numbers and formulas
- Check spelling
- Find and replace cell data and formats
- Work with a subset of data by filtering lists

**Managing Workbooks**
- Manage workbook files and folders
- Create workbooks using templates
- Save workbooks using different names and file formats

**Formatting Printing Worksheets**
- Apply and modify cell formats
- Modify row and column settings
- Modify row and column formats
- Apply styles
- Use automated tools to format worksheets
- Modify Page Setup options for worksheets
- Preview and print worksheets and workbooks

**Modifying Workbooks**
- Insert and delete worksheets
- Modify worksheet names and positions
- Use 3-D references

**Creating and Revising Formulas**
- Create and revise formulas
- Use statistical, date and time, financial, and logical functions in formulas

**Creating and Modifying Graphics**
- Create, modify, position, and print charts
- Create, modify, and position graphics

**Workgroup Collaboration**
- Convert worksheets into Web pages
- Create hyperlinks
- View and edit comments

LEVEL 1: BASIC COMPUTER APPRECIATION
**Microsoft Excel XP - Expert (..2)**

- Import data to Excel
- Export data from Excel
- Publish worksheets and workbooks to the Web
- Create, edit, and apply templates
- Create workspaces
- Use data consolidation
- Create and apply custom number formats
- Use conditional formats
- Use named ranges in formulas
- Use Lookup and Reference functions
- Customize toolbars and menus
- Create, edit, and run macros
- Audit formulas
- Locate and resolve errors
- Identify dependencies in formulas
- Use subtotals with lists and ranges
- Define and apply filters
- Add group and outline criteria to ranges
- Use data validation
- Retrieve external data and create queries
- Create Extensible Markup Language (XML) Web queries
- Create a Microsoft PivotTable®, Microsoft PivotChart®, and PivotTable/PivotChart Reports
- Forecast values with what-if analysis
- Create and display scenarios
- Modify passwords, protections, and properties
- Create a shared workbook
- Track, accept and reject changes to workbooks
- Merge workbooks

**Microsoft Powerpoint 2000 - Core (..)**

- Delete slides
- Create a specified type of slide
- Create a presentation from a template or a wizard
- Navigate among different views (slide, outline, and tri-pane)
- Create a new presentation from existing slides
- Copy a slide from one presentation into another
- Insert headers and footers
- Create a blank presentation
- Create a presentation using the AutoContent Wizard
- Send a presentation via e-mail
- Change the order of slides using Slide Sorter view
- Find and replace text
- Change the layout for one or more slides
- Modify the Slide Master
- Modify slide sequence in the outline pane
- Apply a design template
- Check spelling
- Change and replace text fonts (individual slide and entire presentation)
- Enter text in tri-pane view
- Import text from Microsoft Word
- Change the text alignment
- Create a text box for entering text
- Use the Wrap text in Textbox feature
- Use the Office Clipboard
- Use the Format Painter
- Promote and Demote text in slide and outline pane
- Add a picture from the Clip Art Gallery
- Add and group shapes using WordArt or the Draw Toolbar
- Apply formatting
- Add text to a graphic object using a text box
- Scale and size an object including clip art
- Create tables within PowerPoint
- Rotate and fill an object
Microsoft PowerPoint 2000 - Core (..2)

Customising a Presentation
- Add AutoNumber bullets
- Add speaker notes
- Add graphical bullets
- Add slide transitions
- Animate text and objects

- Preview presentation in black and white
- Print slides in a variety of formats
- Print audience handouts
- Print speaker notes in a specified format

- Start a slide show on any slide
- Use on screen navigation tools
- Print a slide as an overhead transparency
- Use the pen during a presentation

- Save changes to a presentation
- Save as a new presentation
- Publish a presentation to the Web
- Use the Microsoft Office Assistant
- Insert hyperlink

TOTAL DURATION: 20 HOURS

LEVEL 1: BASIC COMPUTER APPRECIATION 11.2
Microsoft PowerPoint XP - Comprehensive (..2)

- Import Excel charts into slides
- Add sound and video to slides
- Insert Word tables on slides
- Export a presentation as an outline

- Set up slide shows
- Deliver presentations
- Manage files and folders for presentations
- Work with embedded fonts
- Publish presentations to the Web
- Use Pack and Go

- Set up a review cycle
- Review presentation comments
- Schedule and deliver presentation broadcasts

LEVEL 1: BASIC COMPUTER APPRECIATION

Microsoft Access 2000 - Core (..1)

Planning and Designing Databases
- Determine appropriate data inputs/outputs for your database
- Create table structure
- Establish table relationships

Working with Access
- Use the Microsoft Office Assistant
- Select an object using the Objects Bar
- Print database objects (tables, forms, reports and queries)
- Navigate through records in a table, query, or form
- Create a database (using a wizard or in-design view)

Building and Modifying Tables
- Create tables by using the Table Wizard
- Set primary keys
- Modify field properties
- Use multiple data types
- Modify tables using Design View
- Use the Lookup Wizard
- Use the Input Mask Wizard
- Create a form with the Form Wizard
- Use the Control Toolbox to add controls
- Modify Format Properties (font, style, font size, color, caption, etc.) of controls
- Use form sections (headers, footers, and detail)
- Use a Calculated Control on a form

Building and Modifying Forms
- Use the Office Clipboard
- Switch between object views
- Enter records using a datasheet
- Enter records using a form
- Delete records from a table
- Find a record
- Sort records
- Apply and remove filters (filter by form and filter by selection)
- Specify criteria in a query
- Display related records in a subdatasheet
- Create a calculated field
- Create and modify a multitable select query

LEVEL 1: BASIC COMPUTER APPRECIATION
### Microsoft Access 2000 - Core (.2)

**Defining Relationships**
- Establish relationships
- Enforce referential integrity

**Producing Reports**
- Create a report with the Report Wizard
- Preview and print a report
- Move and resize a control
- Modify Format Properties (font, style, font size, color, caption etc.)
- Use the control Toolbox to add controls
- Use report sections (headers, footers, and detail)
- Use a Calculated Control in a report

**Integrating with Other Applications**
- Import data to a new table
- Save a table, query, or form as a web page
- Add Hyperlinks

**Using Access Tools**
- Print database relationships
- Back-up and restore a database
- Compact and repair a database

**TOTAL DURATION: 20 HOURS**

### Microsoft Access XP - Core

**Creating and Using Databases**
- Create Access databases
- Open database objects in multiple views
- Move among records
- Format datasheets

**Creating and Modifying Tables**
- Create and modify tables
- Add a predefined input mask to a field
- Create Lookup fields
- Modify field properties

**Creating and Modifying Queries**
- Create and modify Select queries
- Add calculated field to Select queries

**Creating and Modifying Forms**
- Create and display forms
- Modify form properties

**Viewing and Organising Information**
- Enter, edit, and delete records
- Create queries
- Sort records
- Filter records

**Defining Relationships**
- Create one-to-many relationships
- Enforce referential integrity

**Producing Reports**
- Create and format reports
- Add calculated controls to reports
- Preview and print reports

**Integrating with Other Applications**
- Import data to Access
- Export data from Access
- Create a simple data access page

**TOTAL DURATION: 20 HOURS**

---

**LEVEL 1: BASIC COMPUTER APPRECIATION**

13.2

---

**LEVEL 1: BASIC COMPUTER APPRECIATION**

14.1
**LEVEL 1: BASIC COMPUTER APPRECIATION**

---

**Microsoft Outlook 2000 - Core (.1)**

**Using Outlook 2000 to Communicate**
- Read mail
- Send mail
- Compose mail by entering text
- Print mail
- Address mail by entering text
- Use mail features (forward, reply, and recall)
- Use address book to address mail
- Flag mail messages
- Navigate within mail
- Find messages
- Configure basic mail print options
- Work with attachments
- Add a signature to mail
- Customize the look of mail
- Use mail templates (themes) to compose mail
- Integrate and use mail with other Outlook components
- Customize menu and task bars

**Using Outlook 2000 to Manage Messages**
- Create folders
- Sort mail
- Set viewing options
- Archive mail messages
- Filter a view

**Using the Outlook 2000 Calendar**
- Schedule appointments and events
- Set reminders
- Print in calendar
- Schedule multiday events
- Configure calendar print options
- Customize the calendar view
- Schedule recurring appointments
- Customize menu and task bars
- Add and remove meeting attendees
- Plan meetings involving others
- Save a personal or team calendar as Web page
- Book office resources directly (For example, conference rooms)
- Integrate calendar with other Outlook components

---

**Microsoft Outlook 2000 - Core (.2)**

**Navigating and using Outlook 2000 Effectively**
- Use Outlook Help and the Microsoft Office Assistant
- Move items between folders
- Navigate between Outlook components
- Modify the Outlook Master Categories List
- Assign items to a category
- Sort information using categories
- Use the Office Clipboard

**Using Contacts**
- Create, edit, and delete contacts
- Send contact information via e-mail
- Organize contacts by category
- Manually record an activity in a journal
- Link activities to a Contact
- Sort contacts using fields

**Using Tasks**
- Create and update one-time tasks
- Accept and decline tasks
- Organize tasks using categories
- Assign tasks to others
- Create tasks from other Outlook components
- Change the view for tasks

**Integrating Office Applications with Outlook 2000 Components**
- Create and use Office documents inside Outlook 2000

**Using Notes**
- Create and edit notes
- Organize and view notes
- Customize notes

**TOTAL DURATION: 20 HOURS**
Microsoft Outlook XP - Core

Creating and Viewing Messages
- Display and print messages
- Compose and send messages to corporate/workgroup and Internet addresses
- Insert signatures and attachments
- Customize views
- Add appointments, meetings, and events to the Outlook calendar
- Apply conditional formats to the Outlook calendar
- Respond to meeting requests
- Use categories to manage appointments
- Print calendars
- Move messages between folders
- Search for messages
- Save messages in alternate file formats
- Use categories to manage messages
- Set message options
- Create and edit contacts
- Organize and sort contacts
- Link contacts to activities and journal entries
- Create and update tasks
- Modify task organization and task view
- Accept, decline, or delegate tasks
- Create and modify notes
- Use categories to manage tasks and notes

TOTAL DURATION: 20 HOURS

AutoCAD

Level Two

Basics
- Introduction to Engineering Drawing
- Introduction to AutoCAD
- Creating the First Drawing
- Learning the Tools of the Trade
- Work Organisation
- Installing and Configuring AutoCAD

Editing for Productivity
- Editing for Productivity
- Enhancement Drawing Skills
- Adding Text To Drawings
- Using Dimensions
- Advanced Productivity Tools
- Drawing Curves and Solid Fills

Productivity Tools
- Introducing 3D
- Mastering 3D Solids
- Using 3D Surfaces
- 3D Rendering in AutoCAD
- Working with Existing Drawings and Raster Images
- Storing and Linking Data With Graphics
- Getting and Exchanging Data with Drawings
- Introduction to Customisation
- Using ActiveX Automation with AutoCAD
- Integrating AutoCAD into Projects
- AutoLISP Fundamentals

Printing & Plotting
- Printing and Plotting
- 3D Rendering in AutoCAD
- Working with Existing Drawings and Raster Images
- Storing and Linking Data With Graphics
- Getting and Exchanging Data with Drawings
- Introduction to Customisation
- Using ActiveX Automation with AutoCAD
- Integrating AutoCAD into Projects
- AutoLISP Fundamentals

Customisation
- Applications in Mechanical Engineering
- Application in Electrical Engineering
- Application in Architecture and Building

TOTAL DURATION (12 Weeks) 160 Hours

LEVEL 1: BASIC COMPUTER APPRECIATION
16.1
**AutoCAD - Basics (.1)**

**Introduction to AutoCAD**
- Guided Tour
- Working With AutoCAD

**Creating First Drawing**
- Getting to Know the Drawing Toolbar
- Starting the first Drawing
- Specifying Distances with Coordinates
- Interpreting the cursor modes and understanding prompts
- Selecting objects
- Editing with Grips
- Getting Help
- Displaying data in a text window

**Organising the Work**
- Creating a symbol
- Inserting a symbol
- Organising information with layers
- Keeping track of blocks and layers
- Finding files on the hard disk
- Inserting symbols with drag and drop

**AutoCAD - Productivity Tools (.2)**

**Editing for Productivity**
- Creating and Using Templates
- Copying an object multiple times
- Developing drawing
- Drawing parallel lines
- Eliminating blocks, layers, linetypes, shapes and style

**Enhancing Drawing Skills**
- Assembling the parts
- Taking control of the AutoCAD display

**Adding Text to Drawing**
- Adding text to drawing
- Understanding text formatting in AutoCAD
- Using fonts
- Adding special characters
- Adding simple text objects
- Using special characters with single-line text objects
- Substituting fonts
- Accelerating Zooms and Regens with Qtext

**Using Dimensions**
- Creating a dimension style
- Drawing linear dimensions
- Editing dimensions
- Dimensioning Non-orthogonal objects
- Dimensioning non-orthogonal linear distances
- Dimensioning angles
- Adding notes with an arrow
- Skewing dimension lines
- Applying ordinate dimensions
- Adding tolerance notation

**Advanced Productivity Tools**
- Editing Efficiently
- Using external references (Xrefs)
- Using tiled viewports
- Understanding model space and paper space
- Selecting filters, quick select and calculator filtering selections

**Drawing Curves and Solid Fills**
- Introducing polylines
- Editing polylines
- Creating a polyline spline curve
- Using true spline curve
- Marking divisions on a curve
- Sketching with AutoCAD
- Filling in solid areas
AutoCAD - 3D Modeling and Imaging

1. Introducing 3D
   - Creating 3D drawing
   - The UCS and the WCS
   - Viewing the model
   - More sculpturing of 3D solids
   - Making a solid model from a 2D drawing

2. Mastering 3D Solids
   - Putting together two solids
   - Making slides to improve communication
   - More primitives
   - Editing solids with slice and solidedit
   - The selection tool
   - Interference checking
   - Enhancing the 2D drawing process
   - Finding the mass properties
   - Taking advantage of rapid prototyping

3. Using 3D Surfaces
   - Creating a surface model
   - Drawing 3D surfaces
   - Creating complex 3D surfaces
   - Other surface drawing tools
   - Editing a mesh
   - Moving objects in 3D space
   - Viewing model in perspective

AutoCAD - Printing and Plotting

4. Printing and Plotting
   - Plotting the base
   - Understanding the plotter settings
   - WYSIWYG plotting using layout tabs
   - Setting color, line corner styles, and sharing patterns with plot styles
   - Assigning Plot styles directly to layers and objects
   - Plotting multiple layout tabs
   - Storing a page setup
   - Plotter and printer hardware considerations
   - Batch plotting
   - Sending your drawings to a service bureau

5. 3D Rendering in AutoCAD
   - Things to do before starting
   - Creating a quick study
   - Adding a background
   - Effects and lighting
   - Adding reflections and detail with ray tracing
   - Creating and adjusting texture maps
   - Rendering output options
   - Editing image
   - Smoothing out the rough edges
   - Visualisation in 3D Orbit View

6. Working with Existing Drawings and Raster Images
   - Tracing, Scaling and Scanning drawings
   - Importing Raster Images
   - Importing PostScript Files
AutoCAD - Customisation (.5)

Storing and Linking Data with Graphics
- Creating attributes
- Using a dialog box to answer attribute prompts
- Editing attributes
- Extracting and exporting attribute information
- Accessing external databases
- Linking objects to a database

Getting and Exchanging Data from Drawings
- Getting information about drawing
- Exchanging CAD data with other programs
- Using AutoCAD drawings in desktop publishing
- Combining data from different sources

Introduction to Customisation
- Enhancements straight from the source
- Utilities available from other sources
- Putting AutoLISP to work
- Using Third-Party software
- Getting the latest information from online services
- Using the AutoCAD Designer Center

Using ActiveX Automation and AutoCAD
- What is ActiveX Automation
- The AutoCAD Object Model

Integrating AutoCAD into Projects and Organisation
- Customising Toolbars
- Customising Toolbar Tools
- Adding Own pull-down menu
- Understanding the Diesel macro language
- Creating custom linetypes
- Creating Hatch patterns
- Sharing drawings on the World Wide Web

TOTAL DURATION: 160 HOURS

OFFICE MANAGEMENT

Postures Speed and Accuracy Development 20 Hours

Typing Skills
- Microsoft Word 2000/XP - Expert
- Microsoft Excel 2000/XP - Expert
- Microsoft PowerPoint 2000/XP - Advanced
- Microsoft Project 2000 Basic
- Lotus Notes

Office Productivity Tools
- CorelDraw Releases 11
- Microsoft Visio
- Adobe Photoshop 7.0

Graphics

- Digital Cameras
- Scanners
- Photocopy Machines
- Multimedia Equipment
- Dictaphones
- Palmtops
- Personal Information Manager

Using Modern Office Equipment
- Filing Systems
- Office Organisation
- Business Letter writing
- Information Search and Analysis

TOTAL DURATION (12 Weeks) 160 Hours
**Basic Typing Skills**

- Proper posture
- Which hand to use for different parts of the Keyboard
- Position your hands on the HOME keys
- Which fingers to use for key stroking
- Learning the HOME keys
- Using the SPACEBAR
- Using the Enter key
- Using the Shift key to switch to UPPER CASE
- Using the SHIFT key to switch to SYMBOLS and SPECIAL CHARACTERS
- Strategies for improving your typing speed and accuracy
- How to use the numeric keypad
- Basics of Word Processing

**Microsoft Word XP - Expert (.2)**

- Control pagination
- Sort paragraphs in lists and tables
- Create and format document sections
- Create and apply character and paragraph styles
- Create and update document indexes and tables of contents, figures, and authorities
- Create cross-references
- Add and revise endnotes and footnotes
- Create and manage master documents and subdocuments
- Move within documents
- Create and modify forms using various form controls
- Create forms and prepare forms for distribution
- Use Excel data in tables
- Perform calculations in Word tables
- Create, modify, and position graphics
- Create and modify charts using data from other applications
- Align text and graphics
- Create, edit, and run macros
- Customize menus and toolbars
- Track, accept, and reject changes to documents
- Merge input from several reviewers
- Insert and modify hyperlinks to other documents and Web pages
- Create and edit Web documents in Word
- Create document versions
- Protect documents
- Define and modify default file locations for workgroup templates
- Attach digital signatures to documents

**TOTAL DURATION : 20 HOURS**

**LEVEL 2: SPECIAL SKILLS DEVELOPMENT**

**TOTAL DURATION : 10 HOURS**
Microsoft Excel XP - Expert

- Import data to Excel
- Export data from Excel
- Publish worksheets and workbooks to the Web
- Create, edit, and apply templates
- Create workspaces
- Use data consolidation
- Create and apply custom number formats
- Use conditional formats
- Use named ranges in formulas
- Use Lookup and Reference functions
- Customize toolbars and menus
- Create, edit, and run macros
- Audit formulas
- Locate and resolve errors
- Identify dependencies in formulas
- Use subtotals with lists and ranges
- Define and apply filters
- Add group and outline criteria to ranges
- Use data validation
- Retrieve external data and create queries
- Create Extensible Markup Language (XML) Web queries
- Create a Microsoft PivotTable®, Microsoft PivotChart®, and PivotTable/PivotChart Reports
- Forecast values with what-if analysis
- Create and display scenarios
- Modify passwords, protections, and properties
- Create a shared workbook
- Track, accept and reject changes to workbooks
- Merge workbooks

TOTAL DURATION : 10 HOURS

Microsoft PowerPoint XP - Comprehensive (.1)

- Create presentations (manually and using automated tools)
- Add slides to and delete slides from presentations
- Modify headers and footers in the Slide Master
- Import text from Word
- Insert, format, and modify text
- Add tables, charts, clip art, and bitmap images to slides
- Customize slide backgrounds
- Add OfficeArt elements to slides
- Apply custom formats to tables
- Apply formats to presentations
- Apply animation schemes
- Apply slide transitions
- Customize slide formats
- Customize slide templates
- Manage a Slide Master
- Rehearse timing
- Rearrange slides
- Modify slide layout
- Add links to a presentation
- Preview and print slides, outlines, handouts, and speaker notes

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
Microsoft PowerPoint XP - Comprehensive (2)

- Import Excel charts into slides
- Add sound and video to slides
- Insert Word tables on slides
- Export a presentation as an outline

- Set up slide shows
- Deliver presentations
- Manage files and folders for presentations
- Work with embedded fonts
- Publish presentations to the Web
- Use Pack and Go

- Set up a review cycle
- Review presentation comments
- Schedule and deliver presentation broadcasts

TOTAL DURATION: 16 HOURS

Microsoft Project 2000 (1)

- Import a task list from Microsoft Excel to Microsoft Project
- Set default folder options and AutoSave
- Create recurring tasks
- Split a task
- Modify task duration
- Modify calendar working time options
- Apply a calendar to a task
- Add material resources to a project
- Enter costs on resources
- Assign an additional resource to a task without increasing work on the task
- Assign an additional resources to a task to increase work on the task
- Create base calendars
- Set task types (fixed work, fixed units, fixed duration)
- Create a summary task
- Use deadlines and constraints
- Create a milestone task
- Create a new project
- Assign initial resources to tasks
- Enter task relationships
- Enter task information

- Assign tasks using Microsoft Project Central
- Add a progress line to a Gantt chart for a given date
- Set reminders and send schedule note messages
- Record task status in Microsoft Project and Microsoft Project Central
- Display resource allocations
- Reschedule uncompleted work
- Modify project duration
- Compare actuals with the project baseline
- Record actual work on a task
- Save a baseline for the entire project or selected tasks
- Edit task relationship types and lag
Microsoft Project 2000 (..2)

- Use the drawing tools
- Add a hyperlink to a task
- Identify lost elements when saving a project to Microsoft Project 98
- Copy a picture of a view and save it as a Web page
- Use Organizer to share custom views
- Modify a standard report
- Copy and paste a Gantt chart into a Microsoft Word document
- Copy and paste sheet information into a Microsoft Excel spreadsheet
- Update server-based project information using Microsoft Project Central
- Set page setup options
- Create a new custom report

Microsoft Project 2000 (..3)

- Reset table defaults
- Create custom filters
- Define WBS codes
- Create and apply custom groupings
- Format individual bars and bar styles
- Sort a view
- Apply custom filters
- Create a custom table
- Create and apply a custom view
- Format a time scale
- Use outlining features
- Apply a filter using AutoFilter
- Insert a column in a table

TOTAL DURATION: 16 HOURS
**Lotus Notes**

- An overview of Notes
- Orientation to the Notes workstation environment
- Exploring databases
- Exploring the view pane
- Exploring the preview pane
- Examining different Notes databases
- Using the Notes Help database
- Creating a main-topic document
- Creating response documents
- Editing documents
- Marking and printing documents
- An overview of Notes mail
- Creating and sending messages
- Addressing mail
- Attaching files and saving drafts
- Working with attachments
- Managing your mail
- Working with mail folders
- Deleting messages and folders
- Using named styles
- Creating links

**CorelDraw (.1)**

- Exploring the CorelDRAW Screen
- Getting Assistance
- File Management
- Setting Up the Page
- Moving Around the Current Page
- Viewing modes
- Inserting and Deleting Pages
- Changing Pages
- Selecting and Deselecting Objects
- Moving Objects
- Copying and Deleting Objects
- Deleting Objects
- Sizing Objects
- Drawing and Shaping Tools
- Using the Freehand Tool
- Drawing Lines and polylines
- Drawing Freehand Polygons
- Drawing Perfect Shapes
- Reshaping Lines and Polylines
- Drawing Curves
- Reshaping Curves
- Drawing Rectangles
- Drawing Circles
- Arranging Objects
- Grouping and Ungrouping Objects
- Using Guidelines
- Using Snap To
- Aligning Objects

**TOTAL DURATION: 8 HOURS**

LEVEL 2: SPECIAL SKILLS DEVELOPMENT

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
CorelDraw (.2)

Working with Text
- The Text Tool
- Creating Artistic Text
- Editing Text
- Formatting Text
- Setting Text Options
- Creating Paragraph Text
- Choosing Paragraph Options
- Importing Text
- Using the Spell Checker

Outlining and Filling Objects
- The Outline Tool
- The Outline Thicknesses
- Choosing Outline Colors
- Using Fill Tool
- Copying Attributes
- Setting Outline and Fill Defaults

Using Symbols and Clipart
- Adding Symbols
- Adding Clipart
- Modifying Clipart
- Using the scrapbook to Search for Clipart

Transforming Objects
- Mirroring Objects
- Rotating and Skewing Objects
- Using Transform Docker

Special Effects
- Fitting Text to a Path
- Drawing with the Artistic Media Tool
- Shaping an Object with an Envelope
- Extruding an Object
- Blending Two Objects
- Using the Lens Effect
- Adding Perspectives
- Using PowerClips
- Applying Presets
- Applying Drop Shadows

LEVEL 2: SPECIAL SKILLS DEVELOPMENT 2.11

CorelDraw (.3)

Printing
- Exporting to Graphic Formats
- Copy and Pasting into Other Applications
- Print Options
- Print Previewing

Customising Options
- Using Multiple Workspaces
- Customizing the Toolbars
- Using Shortcuts
- Saving Defaults
- Setting File Backups

Working with Paragraph Text
- Implementing Color Management
- Creating Custom Color Palettes
- Choosing a Color Using Color Harmonies
- Applying Colors Using the Color Docker
- Automatically Creating Color Styles
- Importing and Sizing Paragraph Text
- Flowing Text Between Frames
- Formatting Paragraph Frames
- Wrapping Paragraph Text Around Objects
- Applying Drop Caps
- Typing Text Into Objects

Special Text Effects
- Converting Text to Curves
- Creating Blended Text Shadows
- Special Text Effects
- Jumpy Text
- Neon Text
- Glowing Text
- Bevel Text
- Creating Enveloped Text

Special Page Layouts
- Creating a Greeting Card
- Print Previewing the Layout
- Creating Labels

LEVEL 2: SPECIAL SKILLS DEVELOPMENT 2.12
CorelDraw (.4)

Arranging Objects
- Arranging Objects
- Group and Child Objects
- Combining and Breaking Objects
- Welding Objects
- Using Intersection
- Using Trim

Using Layers
- About Layers
- Editing Layers
- Setting Up a Master Layer
- Moving, Copying, and Locking Layers
- Reordering Layers
- Using the Object Manager

Using Styles and Templates
- About Styles and Templates
- Creating a Style
- Applying a Style
- Copying Properties

Special Effects
- About Style and Templates
- Creating a Style
- Applying a Style
- Copying Properties

Custom Creation Tools
- Creating Custom Patterns
- Creating Symbols
- Using the Scrapbook
- Working With Scripts and Presets

CorelDraw (.5)

Working with Bitmaps
- What is a Bitmap
- Importing Bitmap Options
- Adjusting Color
- Hiding Certain Colors in a Bitmap
- Applying Special Bitmap Effects
- Creating Web Images
- Advanced GIF Options

Using Corel Trace
- Types of Graphic Formats
- About Corel Trace
- Tracing Images
- Importing Traced Files into CorelDRAW
- Special Trace Effects

Using Corel RAVE
- About Corel RAVE
- Playing sample RAVE animations
- Performing the five steps necessary to create RAVE animations
- Working with the Timeline Docker
- Tweening objects to create animation
- Exporting to Macromedia Flash format
- Publishing to the web Create web rollovers
- Inserting hyperlinks

TOTAL DURATION: 30 HOURS
Microsoft Visio

- Microsoft Visio Basics
- Designing and Document Computer network
- Document Directory Services
- Plan and Map Websites
- Design Software Components
- Design Database Models
- Drawing Precisely
- Working with CAD Drawings
- Building Architecture: Drawing floor plans and site plans
- Building Plan: Plumbing & Electrical Drawings
- Electrical Engineering and Electronic Diagrams
- Mechanical Engineering: Part and Assembly drawings, Fluid power Diagrams,
- Using Flowcharts to analyse Business
- Organisation Chart
- Sharing Drawings with Others
- Creating Shapes, styles and template

TOTAL DURATION: 10 HOURS

Adobe Photoshop 7 (..1)

Photoshop Environment
- Raster and Vector Graphics
- Photoshop Environment Elements
- Navigating in Photoshop

Selecting Image Area
- Image Size and Resolution
- Cropping

Layers
- The Rectangular and Elliptical Marquee Tools
- The Lasso Tools
- Saving Selections
- The Magic Wand Tool
- The Magnetic Lasso Tool
- Modifying Selections

Blending and Composing
- Floating vs. Fixed selections
- Undoing Previous Steps
- Copying Selections
- Creating Layers
- Transforming Layers
- Copying Layers Between Images
- Saving Images in Photoshop Format
- Arranging Layers

Image Modes
- Defringing
- Opacity and Blending Modes
- Feathering Edges

Colour and Painting
- Mode Characteristics
- Grayscale and Bitmap Modes
- Color Modes

- Selecting Colors
- Painting Tools
- The clone Stamp Tool
Adobe Photoshop 7 (.2)

Text, Layer
Effects and Filters
- Selecting Colors
- Painting Tools
- The Clone Stamp Tool

Adjusting Images
- Brightness/Contrast
- Levels Adjustment Layers
- Toning Tools
- Hue/Saturation

Saving Completed Images
- Saving for Use in Print Applications
- Saving for the Web

TOTAL DURATION: 10 HOURS

Using Modern Office Equipment

Effective Usage
- Understanding of basics of operations
- Basics of Installation
- Operations and effective usage of:
  - Digital Cameras
  - Scanners
  - Photocopy Machines
  - Multimedia Equipment
  - Dictaphones
  - Palmtops
  - Personal Information Manager/organisers

Preventive Maintenance
- Basic preventive maintenance of:
  - Digital Cameras
  - Scanners
  - Photocopy Machines
  - Multimedia Equipment
  - Dictaphones
  - Palmtops
  - Personal Information Manager/organisers

Consumable
- Sourcing of consumable
- Storage of consumable of:
  - Digital Cameras
  - Scanners
  - Photocopy Machines
  - Multimedia Equipment
  - Dictaphones
  - Palmtops
  - Personal Information Manager/organisers

TOTAL DURATION: 15 HOURS
Office Organisation

Principles and Practice
- Filling Systems
- Office Organisation
- Business Letter Writing
- Information Search and Analysis

Excursion
- Guided Tour

Report
- Report on good work practices

TOTAL DURATION: 15 HOURS

PC Support Engineering

Core Hardware
- Installing, Configuring and Upgrading
- Diagnosing and Troubleshooting
- Preventive Maintenance
- Motherboard, Processors & Memory
- Printers
- Basic Networking
- CompTIA A+ Examination Preparation

Operation Systems Fundamentals
- Installing, Configuring and Upgrading
- Diagnosing and Troubleshooting
- Networks
- CompTIA A+ Examination Preparation

Media and Topologies
- Protocols and Standards
- Network Implementation
- Network Support
- CompTIA A+ Exams Preparation

TOTAL DURATION (12 Weeks): 160 Hours
Core Hardware (.1)

- Identify basic terms, concepts, and functions of system modules, including how each module should work during normal operation and during the boot process.
- Identify basic procedures for adding and removing field replaceable modules for both desktop and portable systems.
- Identify available IRQs, DMAs, and I/O addresses and procedures for device installation and configuration.
- Identify common peripheral ports, associated cabling and their connectors.
- Identify proper procedures for installing and configuring IDE/EIDE devices.
- Identify proper procedures for installing and configuring SCSI devices.
- Identify proper procedure for installing and configuring peripheral devices.
- Identify hardware methods of upgrading system performance, procedures for replacing basic subsystem components, unique components and when to use them.
- Identify common symptoms and problems associated with each module and how to troubleshoot and isolate the problems.
- Identify basic troubleshooting procedures and how to elicit problem symptoms from customers.

Core Hardware (.2)

- Identify the purpose of various types of preventive maintenance products and procedures and when to use them.
- Identify issues, procedures and devices for protecting within the computing environment, including people, hardware and the surrounding workspace.
- Distinguish between the popular CPU chips in terms of their basic characteristics.
- Identify the categories of RAM (Random Access Memory) terminology, their locations and physical characteristics.
- Identify the most popular type of motherboards, their components and architecture (bus structures and power supplies).
- Identify the purpose of CMOS (Complementary Metal-Oxide Semiconductor), what it contains and how to change its basic parameters.
- Identify basic concepts, printer operations and printer components.
- Identify care and service techniques and common problems with primary printer types.
- Identify basic networking concepts, including how network works and the ramifications of repairs on network.

TOTAL DURATION: 40 HOURS
Operating System (..1)

- Identify the operating system's functions, structure, and major system files to navigate the operating system and how to get to needed technical information.
- Identify basic concepts and procedures for creating, viewing and managing files, directories and disks. This includes procedures for changing file attributes and the ramifications of those changes (for example, security issues).
- Identify the procedure for installing Windows 9x, and Windows 2000 for bringing the software to a basic operational level.
- Identify steps to perform an operating system upgrade.
- Identify the basic system boot sequences and boot methods, including the steps to create an emergency boot disk with utilities installed for Windows 9x, Windows NT, and Windows 2000.
- Identify procedures for loading/adding and configuring application device drivers, and the necessary software for certain devices.
- Recognize and interpret the meaning of common error codes and startup messages from the boot sequence, and identify steps to correct the problems.
- Recognize common problems and determine how to resolve them.
- Identify the networking capabilities of Windows including procedures for connecting to the network.
- Identify concepts and capabilities relating to the Internet and basic procedures for setting up a system for Internet access.

TOTAL DURATION: 40 HOURS

Network Support (..1)

- Recognize logical or physical network topologies given a schematic diagram or description.
- Specify the main features of 802.2 (LLC), 802.3 (Ethernet), 802.5 (token ring), 802.11 b (wireless) and FDDI networking technologies.
- Specify the characteristics (e.g., Speed, length, topology, cable type, etc.)
- Recognize media connectors and/or describe their uses.
- Choose the appropriate media type and connectors to add a client to an exiting network.
- Identify the purpose, features, and functions of network components.
- Give an example/identify a MAC address.
- Identify the seven layers of the OSI model and their functions.
- Differentiate between network protocols in terms of routing, addressing schemes, interoperability and naming conventions.
- Identify the OSI layers at which the network components operate.
- Define the purpose, function and/or use of protocols within TCP/IP.
- Define the function of TCP/UDP ports. Identify well-known ports.
- Identify the purpose of network services (e.g. DHCP/bootp, DNS, NAT/ICS, WINS, and SNMP).
- Identify IP addresses (IPv4, IPv6) and their default subnet masks.
- Identify the purpose of subnetting and default gateways.
- Identify the differences between public vs. Private networks.
- Identify the basic characteristics (e.g., speed, capacity, media) of the following WAN technologies.
- Define the function of remote access protocols and services.
- Identify security protocols and describe their purpose and function.
Network Support (.2)

- Identify the basic capabilities (i.e. Client support, interoperability, authentication, file and print services, application support, and security) of server operating systems
- Identify the basic capabilities of client workstations (i.e., Client connectivity, local security mechanisms, and authentication).
- Identify the main characteristics of VLANs
- Identify the main characteristics of network attached storage
- Identify the purpose and characteristics of fault tolerance
- Identify the purpose and characteristics of disaster recovery
- Given a remote connectivity scenario (e.g., IP, IPX, dial-up, PPPoE, authentication, physical connectivity etc.), configure the connection
- Identify the purpose, benefits and characteristics of using a firewall
- Identify the purpose, benefits and characteristics of using a proxy
- Given a scenario, predict the impact of a particular security implementation on network functionality (e.g. blocking port numbers, encryption, etc.)
- Given a network configuration, select the appropriate NIC and network configuration settings (DHCP, DNS, WINS, protocols, NetBIOS/hostname, etc.).

Network Support (.3)

- Given a troubleshooting scenario, select the appropriate TCP/IP utility
- Given a troubleshooting scenario involving a small office/home office network failure (e.g., xDSL, cable, home satellite, wireless, POTS), identify the cause of the failure
- Given a troubleshooting scenario involving a remote connectivity problem (e.g., authentication failure, protocol configuration, physical connectivity) identify the cause of the problem
- Given specific parameters, configure a client to connect to the following servers
- Given a wiring task, select the appropriate tool (e.g., wire crimper, media tester/certifier, punch down tool, tone generator, optical tester, etc.)
- Given a network scenario interpret visual indicators (e.g., link lights, collision lights, etc.) to determine the nature of the problem
- Given output from a diagnostic utility (e.g. tracert, ping, ipconfig, etc.) identify the utility and interpret the output
- Given a scenario, predict the impact of modifying, adding, or removing network services (e.g., DHCP, DNS, WINS, etc.) on network resources and users
- Given a network problem scenario, select an appropriate course of action based on a general troubleshooting strategy
- Given a troubleshooting scenario involving a network with a particular physical topology (i.e., Bus, star/hierarchical, mesh, ring, and wireless) and including a network diagram, identify the network area effected and the cause of the problem
- Given a network troubleshooting scenario involving a client connectivity problem (e.g., incorrect protocol/client software/authentication configuration, or insufficient rights/permission), identify the cause of the problem
- Given a network troubleshooting scenario involving a wiring/infrastructure problem, identify the cause of the problem (e.g., bad media, interference, network hardware).
Certified Internet Webmaster

Internet Fundamentals
- 50 Hours
  - Browsing the World Wide Web
  - FTP, Newsgroup and Telnet
  - Electronic Mail
  - Objects, Plug-ins and Viewers
  - Search Engines
  - Security
  - E-Commerce

Web Page Authoring Fundamentals
- 50 Hours
  - HyperText Markup Language (HTML)
  - HTML Coding
  - HTML Horizontal Rules and Graphical Elements
  - HTML Hyperlinks
  - HTML Links
  - Forms
  - HTML Image Techniques
  - HTML Frames
  - Graphical User Interface HTML Editors
  - HTML Extensions

Networking Fundamentals
- 50 Hours
  - Introduction to Networking
  - Network Protocols
  - LAN and WANs
  - TCP/IP Architecture and Internet Addressing
  - Internetworking Servers
  - Server-Side Scripting and Database Connectivity
  - Network Security Essentials

TOTAL DURATION: 50 HOURS

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
CIW Server Administrator - 1
Internet System Management
- Systems and Services
- Internet System Installation and Configurations Issues
- Configuring the System
- User management Essentials
- Managing Users in Windows 2000
- Managing Users in Linux
- Name Resolution in LAN with DNS
- Name Resolution - WINS and Samba
- Implementing Internet Services

Advanced Internet System Management
- Mission-Critical Services
- Installing and Configuring a Web Server
- Advanced Web Server Configuration
- Enabling Secure Sockets Layer
- Configuring and Managing a News Server
- E-mail Server Essentials
- Configuring an E-mail Server
- Proxy Servers
- Logging Activity
- Monitoring and Optimising Internet Servers
- Fault Tolerance and System Backup
- Security Overview

TOTAL DURATION: 50 HOURS

Web Languages - 2
JavaScript Fundamentals
- Introduction to JavaScript
- Working with Variables and Data
- Functions, Methods and Events
- Controlling program Flow
- The JavaScript Object Model
- JavaScript Language Objects
- Developing Interactive Farms
- Cookies and JavaScript Security
- Controlling Frames in JavaScript
- Custom JavaScript Objects

PERL Fundamentals
- Introduction to PERL
- Flow Control in PERL
- Regular Expressions in PERL
- Arrays in PERL
- Hashes in PERL
- Subroutines in PERL
- File input and Output in PERL
- Environmental Variables and Command Line Arguments
- Package and Modules in PERL
- Object-Oriented PERL
- Database Connectivity in PERL
- Debugging PER Programs

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
CIW Site Designer - 3

Design Methodology and Technology
- Overview of Design Concepts
- Web Page Layout and Elements
- Web Site Usability Testing
- Navigation Concepts
- Web Graphics
- Multimedia and the Web
- The Web Development Process
- Mindmapping
- Web Site Implementation Factors
- HTML Standards and Compliance
- HTML Tables and Web Page Structure
- HTML Frames
- Metadata and the web
- Cascading Style Sheets
- Site Development and Microsoft FrontPage 2000
- FrontPage 2000 - Basic Features
- FrontPage 2000 - Advanced
- Site Development with Macromedia Dreamweaver 4.0
- Macromedia Dreamweaver - Basic Features

TOTAL DURATION: 50 HOURS

LEVEL 2: SPECIAL SKILLS DEVELOPMENT

CIW e-Commerce Designer

E-Commerce Strategies and Practices
- Electronic Commerce Foundations
- Law and the Internet
- Web Marketing Goals
- Online Product Promotion
- Site Usability
- Commerce Consumer Service Methods
- Business-to-Business Frameworks
- Site Creation Packages: Outsourcing
- Site Creation Software
- Site Development Software Implementation - Microsoft Platform
- Development An E-Commerce Site Using Commerce Server
- Online Catalog

TOTAL DURATION: 60 HOURS

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
**Microsoft PowerPoint XP - Comprehensive (.1)**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>40 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft PowerPoint 2000 or Microsoft PowerPoint XP Microsoft Visio</td>
<td>40 Hours</td>
</tr>
<tr>
<td>CorelDraw Graphics Suite 11 Corel Designer 9</td>
<td>40 Hours</td>
</tr>
<tr>
<td>Lotus Freelance</td>
<td>20 Hours</td>
</tr>
<tr>
<td>Macromedia Director 8.5</td>
<td>20 Hours</td>
</tr>
<tr>
<td>Photoshop 7</td>
<td>20 Hours</td>
</tr>
<tr>
<td>QuarkXpress 5</td>
<td>20 Hours</td>
</tr>
</tbody>
</table>

**TOTAL DURATION (12 Weeks)** 160 Hours

- Create presentations (manually and using automated tools)
- Add slides to and delete slides from presentations
- Modify headers and footers in the Slide Master
- Import text from Word
- Insert, format, and modify text
- Add tables, charts, clip art, and bitmap images to slides
- Customize slide backgrounds
- Add OfficeArt elements to slides
- Apply custom formats to tables
- Apply formats to presentations
- Apply animation schemes
- Apply slide transitions
- Customize slide formats
- Customize slide templates
- Manage a Slide Master
- Rehearse timing
- Rearrange slides
- Modify slide layout
- Add links to a presentation
- Preview and print slides, outlines, handouts, and speaker notes
Microsoft PowerPoint XP - Comprehensive (..2)

- Import Excel charts into slides
- Add sound and video to slides
- Insert Word tables on slides
- Export a presentation as an outline

- Set up slide shows
- Deliver presentations
- Manage files and folders for presentations
- Work with embedded fonts
- Publish presentations to the Web
- Use Pack and Go

- Set up a review cycle
- Review presentation comments
- Schedule and deliver presentation broadcasts

TOTAL DURATION: 20 HOURS

Microsoft Visio

- Microsoft Visio Basics
- Designing and Document Computer network
- Document Directory Services
- Plan and Map Websites
- Design Software Components
- Design Database Models
- Drawing Precisely
- Working with CAD Drawings
- Building Architecture: Drawing floor plans and sit plans
- Building Plan: Plumbing & Electrical Drawings
- Electrical Engineering and Electronic Diagrams
- Mechanical Engineering: Part and Assembly drawings, Fluid power Diagrams,
- Using Flowcharts to analyse Business
- Organisation Chart
- Sharing Drawing with Others
- Creating Shapes, styles and templates

TOTAL DURATION: 20 HOURS
CorelDRAW (..1)

Introduction
- Exploring the CorelDRAW Screen
- Getting Assistance
- File Management
- Setting Up the Page

Moving Around and Viewing Drawings
- Moving Around the Current Page
- Viewing Modes
- Inserting and Deleting Pages
- Changing Pages

Selecting and Manipulating Objects
- Selecting and Deselecting Objects
- Moving Objects
- Copying and Deleting Objects
- Deleting Objects
- Sizing Objects

Drawing and Shaping Objects
- Drawing and Shaping Tools
- Using the Freehand Tool
- Drawing Lines and Polylines
- Drawing Freehand Polygons
- Drawing Perfect Shapes
- Reshaping Lines and Polylines
- Drawing Curves
- Reshaping Curves
- Drawing Rectangles
- Drawing Circles

Arranging Objects
- Arranging Objects
- Grouping and Ungrouping Objects
- Using Guidelines
- Using Snap To
- Aligning Objects

CorelDRAW (..2)

Working with Text
- The Text Tool
- Creating Artistic Text
- Editing Text
- Formatting Text
- Setting Text options
- Creating Paragraph Text
- Choosing Paragraph Options
- Setting Indents Using the Ruler
- Importing Text
- Using the Spell Checker

Outlining and Filling Objects
- The Outline Tool
- Choosing Outline Thicknesses
- Choosing Outline Colors
- Using Fill Tool
- Copying Attributes
- Setting Outline and Fill Defaults

Using Symbols and Clipart
- Adding Symbols
- Adding Clipart
- Modifying Clipart
- Using the Scrapbook to Search for Clipart

Transforming Objects
- Mirroring Objects
- Rotating and Skewing Objects
- Using Transform Docker

Special Effects
- Fitting Text to a Path
- Drawing With the Artistic Media Tool
- Shaping an Object with an Envelope
- Extruding an Object
- Blending Two Objects
- Using the Lens Effect
- Adding Perspectives
- Using PowerClips
- Applying Presets
- Applying Drop Shadows

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
CorelDRAW (..3)

**Printing**
- Exporting to Graphic Formats
- Copy and Pasting Into Other Applications
- Print Options
- Print Previewing

**Customizing Options**
- Using Multiple Workspaces
- Customizing the Toolbars
- Using Shortcuts
- Saving Defaults
- Setting File Backups

**Working with Paragraph Text**
- Implementing Color Management
- Creating Custom Color Palettes
- Choosing a Color Using Color Harmonies
- Applying Colors Using the Color Docker
- Automatically Creating Color Styles
- Importing and Sizing Paragraph Text
- Flowing Text Between Frames
- Formatting Paragraph Frames
- Wrapping Paragraph Text Around Objects
- Applying Drop Caps
- Tying Text Into Objects

**Special Text Effects**
- Converting Text to Curves
- Creating Blended Text Shadows
- Special Text Effects
- Jumpy Text
- Neon Text
- Glowing Text
- Chrome Text
- Bevel Text
- Creating Enveloped Text

**Special Page Layouts**
- Creating a Greeting Card
- Print Previewing the Layout
- Creating Labels

CorelDRAW (..4)

**Arranging Objects**
- Arranging Objects
- Group and Child Objects
- Combining and Breaking Objects
- Welding Objects
- Using Intersection
- Using Trim

**Using Layers**
- About Layers
- Editing Layers
- Setting Up a Master Layer
- Moving, Copying, and Locking Layers
- Reordering Layers
- Using the Object Manager

**Using Styles and Templates**
- About Styles and Templates
- Creating a Style
- Applying a Style
- Copying Properties

**Special Effects**
- About Styles and Templates
- Creating a Style
- Applying a Style
- Copying Properties

**Custom Creation Tools**
- Creating Custom Patterns
- Creating Symbols
- Using the Scrapbook
- Working With Scripts and Presets
CorelDRAW (..5)

Working with Bitmaps
- What is a Bitmap
- Importing Bitmap Options
- Adjusting Color
- Hiding Certain Colors in a Bitmap
- Applying Special Bitmap Effects
- Creating Web Images
- Advanced GIF Options

Using Corel Trace
- Types of Graphic Formats
- About Corel Trace
- Tracing Images
- Importing Traced Files into CorelDRAW
- Special Trace Effects

Using Corel RAVE
- About Corel RAVE
- Playing sample RAVE animations
- Performing the five steps necessary to create RAVE animations
- Working with the Timeline Docker
- Tweening objects to create animation
- Exporting to Macromedia Flash format
- Publishing to the web Create web rollovers
- Inserting hyperlinks

TOTAL DURATION : 40 HOURS

Lotus Freelance 9.5 (.1)

Introduction to Freelance Graphics
- Starting Freelance Graphics: Opening a Presentation
- Viewing a Screen Show
- Orientation to the Current Page View
- Page Sorter View and Outliner View

Beginning a Presentation
- Creating a New Presentation
- Creating a Title Page: Saving the Presentation
- Using Help
- Printing

Bullet List
- Creating and Editing a Bullet List
- Changing Text Attributes
- Using the Spell Check Features

Organisation and Table Chart
- Creating and Editing a Bullet List
- Changing Text Attributes
- Using the Spell Check Features

Bar and Pie Chart
- Creating a Bar Chart
- Editing a Chart
- Creating and Editing a Pie Chart

Overview of Drawing
- Using the Tools Palette
- Editing Drawn Objects
- Using Diagrams
- Using Drawing Tools to Annotate a Chart

Enhancing a Presentation
- Changing the SmartMaster Set
- Adding Movies
- Making Global Changes
- Screen Show Effects

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
Lotus Freelance 9.5 (.2)

- Outliner View
- Bullet Build Pages
- Rehearsing Your Presentations
- Advanced Printing Techniques
- Importing Chart Data
- Creating a Presentation
- Editing a Presentation
- Using SmartMaster Sets
- Speaker Notes
- Customizing Clip Art
- Advanced Drawing Features
- Screen Show Options
- Multimedia
- Customizing Freelance Graphics
- Internet Intelligence

TOTAL DURATION: 20 HOURS

Macromedia Director 8.5 (.1)

- Director Environment Elements
- Playing a Movie
- Setting Up the Authoring Environment
- Creating a New Movie
- Creating a Cast
- Creating the Movie
- Storyboarding
- Choosing Movie Properties
- Media Types
- Creating Casts
- Working with Sprites
- Tempo
- Transitions
- Markers
- Scripts, Behaviors, and the Behavior Library
- Looping and Synchronizing Music
- Types of Animation
- Flash Animations
- Video Cast Members
- Tweening
- Multiple Cast Members In One Sprite
- Create Shockwave Movies
- Creating Projectors
Macromedia Director 8.5 (.2)

Planning and Importing Media
- Planning the Movie
- Importing from PowerPoint
- Optimizing Images

Adding Navigation
- Replacing Tempo Channel Playback Control
- Working with Images
- Using Behaviors for Navigation

Lingo Scripting Concepts
- Lingo as a Language
- Mechanics
- Keyword types
- Vocabulary
- Putting It Together

Real World Lingo Scripting
- Planning Scripts Based on Objectives
- Navigation Scripts

Data Management Using List
- Creating Radio Buttons and Check Boxes
- Lists, symbols, and the onStartup Handlers
- The Watcher, Message, and Debug Windows
- Creating Loops and Calling Custom Handlers

Preparation for Distribution
- Embedding Fonts
- Branching to other Movies

TOTAL DURATION: 20 HOURS

Adobe Photoshop 7 (.1)

Photoshop Environment
- Raster and Vector Graphics
- Photoshop Environment Elements
- Navigating in Photoshop

Sizing Images
- Image Size and Resolution
- Cropping

Selecting Image Area
- The Rectangular and Elliptical Marquee Tools
- The Lasso Tools
- Saving Selections
- The Magic Wand Tool
- The Magnetic Lasso Tool
- Modifying Selections

Layers
- Floating vs. Fixed Selections
- Undoing Previous Steps
- Copying Selections
- Creating Layers
- Transforming Layers
- Copying Layers Between Images
- Saving Images in Photoshop Format
- Arranging Layers

Blending and Composing
- Defringing
- Opacity and Blending Modes
- Feathering Edges

Image Modes
- Mode Characteristics
- Grayscale and Bitmap Modes
- Color Modes

Colour and Painting
- Selecting Color
- Painting Tools
- The Clone Stamp Tools

LEVEL 2: SPECIAL SKILLS DEVELOPMENT
Adobe Photoshop 7 (.2)

- Selecting Colors
- Painting Tools
- The Clone Stamp Tool

- Brightness/Contrast
- Levels Adjustment Layers
- Toning Tools
- Hue/Saturation

- Saving for Use in Print Applications
- Saving for the Web

TOTAL DURATION: 20 HOURS

QuarkXpress 5.0 (.1)

- Create a New Document
- Place Graphics
- Add Display Type
- Align Items to Guides
- Create Bleeds

- Set Up a Facing-pages Document
- Create Additional Pages
- Define Colors
- Apply Color
- Create and Apply Master Pages

- Flow Text
- Adjust Vertical Spacing
- Align Type Horizontally
- Create Paragraph Rules
- Format Type with Style Sheets
- Modify Style Sheets

- Create a Table Manually
- Create a Table from Text
- Display Graphics in Table Cells
- Resize Rows and Columns
- Modify Table Structure
- Format Table Cells

- Check Spelling
- Apply Runaround
- Format Item Frames
- Inset Text
- Apply Continuation Page Numbering
Level Three

Entrepreneur Training

Starting a business in Nigeria
Feasibility Studies
Sourcing of funds in Nigeria
Project Management

Marketing Concepts
Marketing Skills and Strategy
Market Research
Advertising
Direct Marketing
Selling Against Competition
Developing Proposals

The Balance Sheet
Assets
Liabilities
Measuring solvency & liquidity
Profitability

The Nigeria Labour Law
Productivity Management
Effective Supervision
Industrial Relations in Nigeria
Team Building

Business Contracts
Legal Issues
Writing Business Letters

Computer Education
Software House
Computer Hardware Sales
Networking Company

TOTAL DURATION (12 Weeks) 160 Hours

Level 2: Special Skills Development

QuarkXpress 5.0 (..2)

- Check Spelling
- Apply Runaround
- Format Item Frames
- Inset Text
- Apply Continuation Page Numbering
- Draw Bézier Paths
- Reshape a Picture Box
- Combine Bézier Shapes
- Silhouette Pictures
- Create Drop Caps
- Reverse Type with a Style Sheet
- Typeset Numbers
- Create a Type Mask
- Flow Type on a Path
- Create a Type Shadow
- Draw Bézier Paths
- Reshape a Picture Box
- Combine Bézier Shapes
- Silhouette Pictures
- Choose Appropriate Typefaces
- Choose Appropriate Leading
- Set Justification Options
- Hyphenate Text
- Track Type
- Kern Type
- Determine When To Use Color Management
- Set Up Color Management
- Change Image Profiles
- Choose Printer Device Profiles
- Change Type Formatting Automatically
- Section a Document
- Create A List
- Index Documents
- Create A Book

TOTAL DURATION: 20 HOURS
### Entrepreneur Training

<table>
<thead>
<tr>
<th>Component</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a business in Nigeria</td>
<td>20 Hours</td>
</tr>
<tr>
<td>Feasibility Studies</td>
<td></td>
</tr>
<tr>
<td>Sourcing of funds in Nigeria</td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td></td>
</tr>
<tr>
<td>Marketing Concepts</td>
<td>40 Hours</td>
</tr>
<tr>
<td>Marketing Skills and Strategy</td>
<td></td>
</tr>
<tr>
<td>Market Research</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td></td>
</tr>
<tr>
<td>Direct Marketing</td>
<td></td>
</tr>
<tr>
<td>Selling Against Competition</td>
<td></td>
</tr>
<tr>
<td>Developing Proposals</td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>30 Hours</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
</tr>
<tr>
<td>Measuring solvency &amp; liquidity</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
</tr>
<tr>
<td>The Nigeria Labour Law</td>
<td>30 Hours</td>
</tr>
<tr>
<td>Productivity Management</td>
<td></td>
</tr>
<tr>
<td>Effective Supervision</td>
<td></td>
</tr>
<tr>
<td>Industrial Relations in Nigeria</td>
<td></td>
</tr>
<tr>
<td>Team Building</td>
<td></td>
</tr>
<tr>
<td>Business Contracts</td>
<td>20 Hours</td>
</tr>
<tr>
<td>Legal Issues</td>
<td></td>
</tr>
<tr>
<td>Writing Business Letters</td>
<td></td>
</tr>
<tr>
<td>Computer Education</td>
<td>20 Hours</td>
</tr>
<tr>
<td>Software House</td>
<td></td>
</tr>
<tr>
<td>Computer Hardware Sales</td>
<td></td>
</tr>
<tr>
<td>Networking Company</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DURATION (12 Weeks)</strong></td>
<td>160 Hours</td>
</tr>
</tbody>
</table>

### Level Four

#### International Certifications

<table>
<thead>
<tr>
<th>Certification</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO Certified Network Associate (CCNA)</td>
<td>160 Hours</td>
</tr>
<tr>
<td>Designing CISCO Networks (CCDA)</td>
<td></td>
</tr>
<tr>
<td>Certified CISCO Network Professional (CCNP)</td>
<td></td>
</tr>
<tr>
<td>Microsoft Certified System Engineer (MCSE)</td>
<td>160 Hours</td>
</tr>
<tr>
<td>Microsoft Certified Solution Developer (MCSD)</td>
<td></td>
</tr>
<tr>
<td>Oracle9i Database Administrator Certified Professional (OCDBA)</td>
<td>160 Hours</td>
</tr>
<tr>
<td>Internet Application Developer Release 6i</td>
<td></td>
</tr>
</tbody>
</table>

### Level Three

#### The Balance Sheet

<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
</tr>
<tr>
<td>Measuring solvency &amp; liquidity</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
</tr>
<tr>
<td>The Nigeria Labour Law</td>
<td></td>
</tr>
<tr>
<td>Productivity Management</td>
<td></td>
</tr>
<tr>
<td>Effective Supervision</td>
<td></td>
</tr>
<tr>
<td>Industrial Relations in Nigeria</td>
<td></td>
</tr>
<tr>
<td>Team Building</td>
<td></td>
</tr>
</tbody>
</table>

#### Legal Issues

<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Contracts</td>
<td></td>
</tr>
<tr>
<td>Legal Issues</td>
<td></td>
</tr>
<tr>
<td>Writing Business Letters</td>
<td></td>
</tr>
</tbody>
</table>

#### Human Resource Management

<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Education</td>
<td></td>
</tr>
<tr>
<td>Software House</td>
<td></td>
</tr>
<tr>
<td>Computer Hardware Sales</td>
<td></td>
</tr>
<tr>
<td>Networking Company</td>
<td></td>
</tr>
</tbody>
</table>
Niger Delta Development
Commission
Computer Training Programme

CISCO - Associate
- Bridging/Switching: 80 Hours
- OSI Reference Model & Layered Communication
- Routed Protocols
- Routing Protocols
- WAN Protocols
- Network Management
- LAN Technologies
- Cisco Basics, IOS & Network Basics

CDA (60-407)

Identify Customer Needs: 80 Hours
- Design the Network Structure
- Build a Prototype Network Structure
- Interconnecting Basics
- LAN Protocols
- WAN Technologies
- Bridging & Switching
- Routed Protocols
- Routing Protocols
- Network Management

TOTAL DURATION (12 Weeks): 160 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS

CISCO - Professional (CCNP)
- Routing Principles
- Extending IP Addresses
- Configuring OSPF in a Single Area
- Interconnecting Multiple Areas
- Configuring IS-IS Protocol
- Configuring EIGRP
- Configuring Basic Border Gateway Protocol
- Implementing BGP in Scalable Networks
- Optimising Routing Update Operations

Building Scalable Cisco Internetworks Exam 640-554:
- 40 Hours

Switching Exam (SWITCH 640-640):
- 20 Hours
- CGMP
- Cisco Fundamentals
- Multicast
- Multilayer Switching
- Spanning Tree
- Switching Interconnectivity
- Troubleshooting
- Trunking
- VLAN Operations

Remote Access Exam (NTFAC 640-608):
- 30 Hours
- Cisco Remote Access Networks Introduction
- Selecting CISCO Products for Remote Connections
- Assembling and Cabling the WAN Components
- Configuring Asynchronous Connections to a Central site with Modems
- Configuring PPP and Controlling Networks Access with PAP and CHAP
- Using ISDN and DDR Technologies to Enhance Remote Connectivity
- Optimising the use of DDR Interfaces
- Using X.25 for Remote Access
- Establishing a Dedicated Frame Relay Connection and Control Traffic
- Enabling a Backup to the Permanent Connection
- Managing Network Performance with Queuing and Compression
- Scaling IP Addresses with Network Address Transition
- Using AAA to Scale Access Control in an Enhanced Network

Support Exam (SIPRI 640-606):
- 40 Hours
- Connectionless Models
- Troubleshooting

TOTAL DURATION (12 Weeks): 150 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS
Niger Delta Development Commission

Computer Training Programme

Microsoft Certified System Engineer

Client Operating System
- Installing, Configuring and Administering Microsoft Windows 2000 Professional (Exam 70-210) 
  - 20 Hours

Network System
- Installing, Configuring and Administering Microsoft Windows 2000 Server (Exam 70-215) 
  - 20 Hours
- Implementing and Administering a Microsoft Windows 2000 Network Infrastructure (Exam 70-216) 
  - 20 Hours
- Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure (Exam 70-217) 
  - 20 Hours

Core - Design
- Designing a Microsoft Windows 2000 Directory Services Infrastructure (Exam 70-291) 
  - 20 Hours

Elective
- Installing, Configuring and Administering Microsoft Exchange 2000 Server (Exam 70-224) 
  - 30 Hours
- Designing and Implementing Databases with Microsoft SQL Server 2000 Enterprise Edition (Exam 70-229) 
  - 30 Hours

TOTAL DURATION (12 Weeks) 
160 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS

Microsoft Certified Solution Developer

Core - Web Application Development
- Developing and Implementing Web Applications with Microsoft Visual Basic® .NET and Microsoft Visual Studio® .NET (Exam 70-305) 
  - 40 Hours
- Developing and Implementing Windows-based Applications with Microsoft Visual Basic .NET and Microsoft Visual Studio .NET (Exam 70-306) 
  - 30 Hours

Core - Windows Application Development
- Developing XML Web Services and Server Components with Microsoft Visual Basic .NET and the Microsoft .NET Framework (Exam 70-310) 
  - 30 Hours

Core - Solution Architecture
- Analyzing Requirements and Defining .NET Solution Architectures (Exam 70-300) 
  - 30 Hours
- Designing and Implementing Databases with Microsoft SQL Server™ 2000 Enterprise Edition (Exam 70-229) 
  - 30 Hours

TOTAL DURATION (12 Weeks) 
168 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS
Oracle9i Database Administrator Certified Professional

Introduction to Oracle9i: SQL  40 Hours

Oracle9i: Database: Fundamentals I  40 Hours

Oracle9i: Database: Fundamentals II  40 Hours

Oracle9i: Database: Performance Tuning  40 Hours

TOTAL DURATION (12 Weeks)  160 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS  1.5

Internet Application Developer Release 6i

Introduction to Oracle: SQL and PL/SQL  40 Hours

Develop PL/SQL Programs Units  40 Hours

Build Internet Applications I  40 Hours

Building Internet Application II  40 Hours

TOTAL DURATION (12 Weeks)  160 Hours

LEVEL 4: INTERNATIONAL CERTIFICATIONS  1.6
Train The Trainer

Learning in Organisations and Barriers to Learning 15 Hours

Learning styles 15 Hours

Training Policy Statements, Job Descriptions and Training Plans 10 Hours

Developing and Delivering 1-to-1 Training 15 Hours

Developing and Delivering Group Training 15 Hours

Using feedback for evaluation 10 Hours

TOTAL DURATION (6 Weeks) 80 Hours

Train The Trainer (..1)

- Explain what training is.
- Show why there is a need to train.
- Show how training takes place.
- Show the benefits of effective use of training.
- Show who is involved in training.
- Describe the skills required by the trainer.
- Show the conditions for learning to occur.
- Explain the process of Learning and motivation.

Learning styles
- Establish Training objectives.
- Use Skills such as Introduction, Induction, explanation, variation, using examples, summarising, questions, and positive feedback.
- Use Tools such as Flip chart/White board, OHP, Display/Presentation equipment.

Training Policy Statements, Job Descriptions and Training Plans
- Describe Training policy statements and Why they are used.
- Interpret a training policy statement.
- Writing a training policy statement.
- Show what are Training Plans and how are they used.
Train The Trainer (..2)

Describe when the instructional technique is used.
Develop a 1-to-1 training session
Deliver a 1-to-1 training session.

- Training definition
- Defining each training module
- Constructing an instructional plan for group training
- Designing practice tasks
- Designing the course specification
- Equipment and materials
- Class Organisation and set-up

- Taking and giving feedback
- Assessment forms
- Training Documentation
  - Department Training Plan
  - 1-To-1 Break-down Sheet
  - Group Training Instructional Plan
  - Course Specification
  - TTT Assessment Form
  - Skill Elements
- Student Course Assessment And Feedback
- Trainer Course Assessment And Feedback
  - Documentation List

TOTAL DURATION: 80 HOURS