



Supreme Council of Universities
Central Unit of
IT Training

Training Manual

(Version III, Oct., 2011)



Training



TABLE OF CONTENTS

TABLE OF CONTENTS	2
TRAINING TRACKS	3
BASIC TRACK:	3
ADVANCED TRACK:	3
PROFESSIONAL TRACK:	3
DEPENDANCE MATRIX	4
1. BASIC TRACK	5
101 Typing	5
102 Basic Concepts of IT	5
103 Using Computers and Managing Files	6
104 Word Processing	6
105 Spreadsheets	7
106 Presentations	7
107 Database	8
108 Information and Communications	8
109 Introduction to PC Maintenance and Protection	9
2. ADVANCED TRACK	10
201 Advanced PowerPoint	10
202 Web Publishing Using FrontPage	11
203 Web Authoring Using Dreamweaver	12
204 Graphics – Adobe Photoshop	13
205 2D Animation (Macromedia Flash)	14
206 A+™ Certification: Core Hardware Second Edition - A CompTIA Certification	15
207 Advanced Operating Systems	16
208 Advanced Word Processing	19
209 Advanced Spreadsheets	21
210 Advanced Database	23
3. PROFESSIONAL TRACK	25
301 Programming using C#	25
302 Relational Database Fundamentals – Introduction to SQL	25
303 Developing Microsoft ASP.NET Web Applications Using Visual Studio .NET	26
304 Scientific Research Tools (Introduction to SPSS)	26
305 Scientific Research Tools (Introduction to MatLab)	27
306 Project Management using Microsoft Project	27



TRAINING TRACKS

BASIC TRACK:

Code	Course	Prerequisites	Hrs
101	Typing		12
102	Concepts of IT		9
103	Using Computers and Managing Files	102	15
104	Word Processing	102, 103	18
105	Spreadsheets	102, 103	15
106	Presentations	102, 103	15
107	Database	102, 103, 105	15
108	Information and Communication	102, 103	12
109	Introduction to PC Maintenance and Protection	102, 103, 108	9
			120

ADVANCED TRACK:

Code	Course	Prerequisites	Hrs
201	Advanced Powerpoint	101 – 109	18
202	Web Publishing using Front Page	101 – 108	18
203	Web Authoring using Dream Weaver	101 – 108	24
204	Graphics - Adobe Photoshop	102, 103	18
205	2D Animation-Macromedia Flash	102, 103	18
206	A+ Certification (Core Hardware)	102, 103, 109	24
207	Advanced Operating Systems	102, 103	15
208	Advanced Word Processing	102, 103, 104	18
209	Advanced Spreadsheets	102, 103, 105	18
210	Advanced Database	102, 103, 105, 107	18
			189

PROFESSIONAL TRACK:

Code	Course	Prerequisites	Hrs
301	Developing Windows Applications using C#	102, 103, 108 + Programming Fundamentals	24
302	Relational Database Fundamentals Introduction to SQL	102, 103, 107, 108	24
303	Web Programming using ASP dot Net	102, 103, 108, 202, 301, 302	24
304	Scientific Research Tools (Statistical Analysis using SPSS)	102, 103, 105	18
305	Scientific Research Tools (Introduction to Matlab)	102, 103, 105 + Programming Fundamentals	24
306	Project Management using Microsoft Project	102, 103	18
			132

1. BASIC TRACK

101 TYPING

12 Hours

Course Requirements	None
Course Description	This course enhances the user Arabic and English typing skills
Course Content	<ul style="list-style-type: none"> ○ This lesson will teach you basic hand positions ○ You will add the G and H keys ○ Lets you start trying some diagonal keys on the left hand ○ Lets you start trying some diagonal keys on the right hand ○ Review ○ Will help you learn capitalization and punctuation ○ Will help you learn the question mark diagonal slashes and hyphen ○ Increase you typing speed ○ Will introduce you to using numerals ○ Will introduce you some special characters ○ Will let you practice sentences with most of letters of the alphabet in them ○ Stress on accuracy ○ is timed finish in 5 min with accuracy 90% ○ Teaches you more special characters ○ Practice at speed and accuracy ○ Some tricky combinations ○ Tests endurance ○ Stress speed and accuracy Get 35+WPM and 95% accuracy

102 BASIC CONCEPTS OF IT

9 Hours

Course Requirements	None
Course Description	Information Technology provides an overview of computer hardware and software, networking, and the use of computers in a number of everyday applications.
Course Content	<ul style="list-style-type: none"> ○ Getting Started ○ Hardware and Storage ○ Software ○ Information Networks ○ Computers in Everyday Life ○ Security, Copyright, and the Law

103 USING COMPUTERS AND MANAGING FILES

15 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology
Course Description	<p>Using the Computer and Managing Files shows users how to start, shut down, and restart the computer; display system and desktop information and online help; work with icons and windows; organize files and folders; and edit and print data.</p>
Course Content	<ul style="list-style-type: none"> ○ Getting Started ○ Formatting a Diskette and Using Help ○ Understanding the Desktop Environment ○ Organizing Files ○ Finding Folders and Files ○ Editing and Printing Data

104 WORD PROCESSING

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>Word Processing shows users how to use a word processing application to create documents and manipulate and format text. This course also shows users how to prepare a document for printing, preview and print a document, create tables, import objects, and merge a mailing list with a document.</p>
Course Content	<ul style="list-style-type: none"> ○ Getting Started ○ Adding Text and Using Templates ○ Manipulating Text ○ Searching Text and Formatting Paragraphs ○ Finishing a Document ○ Printing a Document ○ Using Tables ○ Manipulating Graphics and Objects ○ Using a Mailing List

105 SPREADSHEETS

15 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>Spreadsheets show users how to work with a spreadsheet application to insert and manipulate data. It also shows users how to create formulas and functions, format and print a spreadsheet, import objects, and create and adjust charts.</p>
Course Content	<ul style="list-style-type: none"> ○ Getting Started ○ Using Help and Display Settings ○ Adding and Moving Data ○ Manipulating Data ○ Using Formulas ○ Using Functions ○ Formatting a Spreadsheet ○ Printing a Spreadsheet ○ Using Advanced Features

106 PRESENTATIONS

15 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>Presentations show users how to work with a presentation application to insert, manipulate, and format text, images, and slides. It also shows users how to draw objects and produce charts for a presentation; how to print and distribute a presentation; and how to add special effects to a slide presentation. This course describes how to meet International Computer Driving License objectives using Microsoft PowerPoint 2000 on a personal computer that uses a Windows operating system. The ICDL test can be taken with any presentation application, and although this course demonstrates a specific application. The tasks it teaches can be applied to other applications as well.</p>
Course Content	<ul style="list-style-type: none"> ○ Getting Started ○ Using Help and Changing Display Settings ○ Creating a Presentation ○ Copying, Moving, and Deleting ○ Formatting a Presentation Document ○ Drawing and Changing Objects ○ Creating Charts and Importing Objects ○ Printing and Distribution ○ Adding Effects and Delivering the Show

107 DATABASE

15 Hours

Course Requirements	<ul style="list-style-type: none">○ Basic Concepts of Information Technology○ Using Computers and Managing Files○ Spreadsheets
Course Description	Database shows users how to work with a database application to create a database; create, use, and change a data entry form; retrieve information; and create reports.
Course Content	<ul style="list-style-type: none">○ Getting Started○ Creating a Database○ Using Data Entry Forms○ Retrieving Information from a Database○ Creating Reports

108 INFORMATION AND COMMUNICATIONS

12 Hours

Course Requirements	<ul style="list-style-type: none">○ Basic Concepts of Information Technology○ Using Computers and Managing Files
Course Description	Information and Communications shows users how to open a Web browsing application, search for information on the Web, and use electronic mail to send and receive messages.
Course Content	<ul style="list-style-type: none">○ Getting Started○ Browsing the Web○ Searching the Web○ Getting Started Using Electronic Mail○ Creating Messages○ Using Message Features○ Receiving Messages

1 09 INTRODUCTION TO PC MAINTENANCE AND PROTECTION

9 Hours

Course Requirements	<ul style="list-style-type: none">○ Basic Concepts of Information Technology○ Using Computers and Managing Files○ Information and Communication
Course Description	<p>This course shows users how to Add new hardware and devices to your system, Perform maintenance and diagnose common problems, Install new software, Use the Internet and Protect your PC from viruses, spam and other nuisances</p>
Course Content	<ul style="list-style-type: none">○ Adding New Hardware and Devices to Your System<ul style="list-style-type: none">▪ Most Popular Peripherals▪ Understanding Ports▪ Adding New External Hardware▪ Adding New Internal Hardware▪ Using the Add Hardware Wizard▪ Connecting Portable Devices to Your PC○ Setting Up a Home Network<ul style="list-style-type: none">▪ How Networks Work▪ Setting Up a Wired or Wireless Network▪ Running the Network Setup Wizard▪ Setting Up Wireless Security▪ Sharing Files and Folders Across the Network○ Performing Routine Maintenance<ul style="list-style-type: none">▪ Free Up Disk Space by Deleting Unnecessary Files▪ Make Your Hard Disk Run Better by Defragmenting▪ Perform a Hard Disk Checkup with ScanDisk▪ Keep Your Hardware in Tip-Top Condition○ Dealing with Common Problems<ul style="list-style-type: none">▪ How to Troubleshoot Computer Problems▪ What to Do When Windows Freezes▪ Dealing with a Major Crash▪ Undoing the Damage with System Restore

2. ADVANCED TRACK

201 ADVANCED POWERPOINT

18 Hours

Course Requirements

- Typing using Typer Shark Deluxe
- Basic Concepts of Information Technology
- Using Computers and Managing Files
- Word Processing
- Spreadsheets
- Presentations
- Database
- Information and Communication
- Introduction to Computer Security

Course Description

This course teaches students to understand and use the advanced features of Microsoft PowerPoint. It is designed for Advanced users. Students can learn from this course the following:

- Creating a screen- show presentation by using guidelines
- Creating a custom template
- Open and modifying a Microsoft Word outline and table
- Using Excel charts in PowerPoint
- Creating charts by using Microsoft Graph
- Using drawing tools to create flow charts
- Working with toolbar options
- Using automatic timings as well as manual timings in presentations

Course Content

- **Concept and design**
 - Understanding the needs of the audience
 - Creating a storyboard
 - Capturing audience attention
 - Using design consistency
 - Review Questions
- **The presentation environment**
 - Working with the physical location
 - Setting the stage
 - Working with the equipment
 - Being prepared
 - Review questions
- **Creating a photo album**
 - Adding album content
 - Choosing an album layout
 - Formatting the album
 - Review questions
- **Using diagrams and organization charts**
 - Adding organization charts and diagrams
 - Working with organization charts
 - Working with diagrams
 - Formatting organization charts and diagrams
 - Review questions
- **Using tables and charts**
 - Adding tables
 - Working with columns and rows
 - Formatting tables
 - Adding charts
 - Entering data
 - Changing the chart type
 - CUSTOMISING CHARTS
 - Review questions
- **Embedding and linking objects**
 - Working with linked objects
 - Working with embedded objects
 - Working with hyperlinks
 - Review questions
- **Applying custom animation**

	<ul style="list-style-type: none"> • Adding effects • Editing animation effects • Applying animation enhancements • Adding slide transitions • Review questions ○ Using movies, sounds, and voice narrations <ul style="list-style-type: none"> • Adding movies • Adding sounds • Adding voice narrations • Review questions ○ More on presenting presentation <ul style="list-style-type: none"> • Creating custom shows • Customizing the show set up • Packaging presentations on to a CD • Broadcasting a presentation • Review questions ○ Using Macros <ul style="list-style-type: none"> • Creating Macros • Managing Macros • Setting Macro Security • Review
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202 WEB PUBLISHING USING FRONTPAGE

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Typing using Typer Shark Deluxe ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Word Processing ○ Spreadsheets ○ Presentations ○ Database ○ Information and Communication
Course Description	<p>Web Publishing using FrontPage requires the candidate to manipulate web pages and sites and change their properties. Also, he can construct static pages and sites using page templates.</p>
Course Content	<ul style="list-style-type: none"> ○ Introduction to FrontPage. ○ What' is FrontPage, an HTML overview and naming files. <ul style="list-style-type: none"> ▪ Creating new pages, adding new pages, saving pages, opening pages, removing pages and using Page templates. ▪ Using page properties dialog box, the general tab, the background tab and the margins tab. ▪ Creating a new web file using Web site templates, opening a web site, closing a web site and deleting a web site. ○ The FrontPage Interface <ul style="list-style-type: none"> ▪ FrontPage workspace: using views bar: Page window button, Folders window button, Reports window button, Navigation window button, Hyperlinks window button, Tasks window button and the, Main menu bar, Formatting toolbar, Page tabs and the title bar. ▪ Changing the Page window using Page view windows, the Normal window, the HTML window, the Preview window. ○ Toolbars <ul style="list-style-type: none"> ▪ The Standard Toolbar and the buttons Create a new normal page, Open, Save, Search, Publish Web, Toggle Pane, Print, Preview in Browser, Spelling, Cut, Copy, Paste, Format Painter, Undo, Redo, Web Component, Insert Table, Insert Picture from File, Drawing, Insert Hyperlink, Refresh, Stop, Show All, Help and Customizing Tools. ▪ The Formatting Toolbar: Using the drop-down lists Style, Font, Font Size and Font Style and the buttons Text Alignment, Font Size, List, Indent, Borders, Highlight and Font Color.

	<ul style="list-style-type: none"> ○ Text <ul style="list-style-type: none"> ▪ Working with Text: Adding, Editing, Aligning, Creating bulleted lists and adding paragraphs. ○ Colors <ul style="list-style-type: none"> ▪ Working with Colors: Picking colors using the More Colors dialog box, the Color dialog box, Adding custom colors, removing custom colors. ○ Images <ul style="list-style-type: none"> ▪ Working with Images: Adding, Removing, Resizing, Using .jpg files and .gif files. ○ Links <ul style="list-style-type: none"> ▪ Using Hyperlinks: About hyperlinks, creating hyperlinks, changing hyperlinks and removing hyperlinks ▪ Using E-mail Links: Creating e-mail links, changing e-mail links and removing e-mail links. ▪ Using Other Links: Image mapping, Adding bookmarks and removing bookmarks. ○ Tables and Cells <ul style="list-style-type: none"> ▪ Working with Tables: Adding tables, editing tables, using table properties. ▪ Working with Cells: Splitting cells, merging cell and using cell properties. ○ Productivity <ul style="list-style-type: none"> ▪ Working with Web Pages: Using text and graphics, linking pages and creating thumbnails. ○ Publishing <ul style="list-style-type: none"> ▪ Publishing a Site: Previewing the web site, Trouble-Shooting, Using a server or disk-based web sites, Using web servers, HTTP publishing and FTP publishing
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203 WEB AUTHORIZING USING DREAMWEAVER

24 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Typing using Typer Shark Deluxe ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Word Processing ○ Spreadsheets ○ Presentations ○ Database ○ Information and Communication
Course Description	<p>Web Authoring using Dreamweaver Introductory course will introduce you to the basics of the Macromedia Dreamweaver 4.0 Web development application.</p>
Course Content	<ul style="list-style-type: none"> ○ Dreamweaver Basics <ul style="list-style-type: none"> ▪ Internet Access and HTML ▪ The Dreamweaver Environment ▪ Previewing in a Browser ▪ Viewing and Managing HTML Code ○ Creating a Basic Web Page <ul style="list-style-type: none"> ▪ Creating and Formatting Text ▪ Saving and Titling Web Pages ▪ Working with Images ○ Designing a Web Site <ul style="list-style-type: none"> ▪ Defining a Web Site ▪ Working with the Site Window ▪ Working with Templates ○ Working with Text <ul style="list-style-type: none"> ▪ Importing Text ▪ HTML Text ▪ Character Formatting ▪ Paragraph Formatting ▪ HTML Styles ○ Working with Links <ul style="list-style-type: none"> ▪ Links within a Site ▪ Anchors

	<ul style="list-style-type: none"> ▪ Working with External Links ○ Working with Images <ul style="list-style-type: none"> ▪ Importing Images ▪ Resizing Images ▪ Using Images as Links ○ Working with Tables <ul style="list-style-type: none"> ▪ Creating Tables to Line Up Text ▪ Changing Table Layout ▪ Formatting Text in Tables ▪ Table Attributes ▪ Using Tables for Layout ○ Building a Site with Frames <ul style="list-style-type: none"> ▪ Creating a Frameset ▪ Defining Frame Size ▪ Adding Content to a Frameset ▪ Specifying Frame Link Destinations ○ Uploading a Web Site <ul style="list-style-type: none"> ▪ Checking the Site ▪ Uploading the Site
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204 GRAPHICS – ADOBE PHOTOSHOP

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>In this course, you will learn to use several tools for selecting parts of images, and will move, duplicate, and resize images. You will learn to use layers, and to apply layer effects and filters to create special effects, including lighting and texture effects. Additionally, you will use painting tools and blending modes to create shading effects, and will perform adjustments to contrast and color balance. You will save images in formats for print and Web use.</p>
Course Content	<ul style="list-style-type: none"> ○ Photoshop's Environment <ul style="list-style-type: none"> ▪ Raster and Vector Graphics ▪ Photoshop Environment Elements ▪ Navigating in Photoshop ○ Sizing Images <ul style="list-style-type: none"> ▪ Image Size and Resolution ▪ Cropping ○ Selecting Image Areas <ul style="list-style-type: none"> ▪ The Rectangular and Elliptical Marquee Tools ▪ The Lasso Tools ▪ Saving Selections ▪ The Magic Wand Tool ▪ The Magnetic Lasso Tool ▪ Modifying Selections ○ Layers <ul style="list-style-type: none"> ▪ 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 Compositing <ul style="list-style-type: none"> ▪ Defringing ▪ Opacity and Blending Modes ▪ Feathering Edges ○ Image Modes <ul style="list-style-type: none"> ▪ Mode Characteristics ▪ Grayscale and Bitmap Modes ▪ Color Modes

	<ul style="list-style-type: none"> ○ Color and Painting <ul style="list-style-type: none"> ▪ Selecting Colors ▪ Painting Tools ▪ The Clone Stamp Tool ○ Text, Layer Effects, & Filters <ul style="list-style-type: none"> ▪ Type Layers ▪ Layer Effects ▪ Filters ▪ Merging and Flattening Layers ○ Adjusting Images <ul style="list-style-type: none"> ▪ Brightness/Contrast ▪ Levels Adjustment Layers ▪ Toning Tools ▪ Hue/Saturation ○ Saving Completed Images <ul style="list-style-type: none"> ▪ Saving for Use in Print Applications ▪ Saving for the Web
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205 2D ANIMATION (MACROMEDIA FLASH)

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>Fast Track to Macromedia Flash MX is designed to teach a wide spectrum of users how to design and deliver cross-platform, low-bandwidth animations, presentations, and Web applications using Macromedia Flash MX. It is a task-based course, with students learning by doing. Along with covering the basics of Macromedia Flash MX, the course focuses on best practices and design, stressing the importance of usability, accessibility, optimization, and performance.</p>
Course Content	<ul style="list-style-type: none"> ○ Learning the Basics <ul style="list-style-type: none"> ▪ Introduction to Macromedia Flash MX ▪ The Macromedia Flash MX interface ▪ Creating a new Macromedia Flash MX document ▪ Developing in Macromedia Flash MX ○ Creating Simple Graphics and Text <ul style="list-style-type: none"> ▪ Using graphics ▪ Importing graphics ▪ Using text ▪ Masking ○ Adding Simple Animation <ul style="list-style-type: none"> ▪ Working with symbols, libraries, and instances ▪ Creating frame-by-frame animation ▪ Motion tweening ▪ Using motion guides ▪ Shape tweening ▪ Adding stop actions ○ Using Symbols and Libraries <ul style="list-style-type: none"> ▪ Graphic symbols ▪ Button symbols ▪ Movie clip symbols ▪ The structure of a Macromedia Flash MX document ▪ Working with libraries ○ Enhancing Functionality Using Actions and ActionScript <ul style="list-style-type: none"> ▪ Using ActionScript ▪ Creating interactive buttons ▪ Linking to a URL. ○ Creating Compact Movies <ul style="list-style-type: none"> ▪ Using the Load Movie action to create more efficient documents ▪ Using shared libraries to create smaller Macromedia Flash MX documents ○ Adding Sound and Video <ul style="list-style-type: none"> ▪ Adding sound ▪ Modifying the sound level

- Adding video
- Using Components
- The Bandwidth Profiler
- **Publishing**
 - Factors to consider before publishing
 - Techniques for optimizing movies
 - Publishing

206 A+™ CERTIFICATION: CORE HARDWARE SECOND EDITION - A COMPTIA CERTIFICATION

24 Hours

Course Requirements

- Basic Concepts of Information Technology
- Using Computers and Managing Files
- Introduction to Computer Security

Course Description

This course is one of two courses you will need to take if your job responsibilities include entry-level computer service technician support duties. It is also one of two courses of study for the CompTIA A+ certification program. In this course, you'll build on your end-user background knowledge as you acquire the specific skills required to install, configure, upgrade, troubleshoot, and repair PC hardware components and systems.

Course Content

- **Setting Up a Personal Computer**
 - Install Video Output Devices
 - Install PS/2 Devices
 - Install Parallel Devices
 - Install Serial Devices
 - Install Game and Sound Devices
 - Install USB Devices
 - Install FireWire Devices
 - Connect Wireless Devices
- **Installing or Removing Internal Hardware**
 - Establish an ESD-free Work Area
 - Install or Remove Adapter Cards
 - Install a Network Adapter and Cable
 - Install or Remove IDE Drives
 - Install or Remove Internal SCSI Drives
 - Install External SCSI Devices
 - RAID
- **Upgrading System Components**
 - Add Memory
 - Upgrade the CPU
 - Add a CPU
 - Upgrade the System BIOS
 - Upgrade the Power Supply
 - Upgrade the System Board
 - Decide When to Upgrade
- **Supporting Portable Computing Devices**
 - Connect External Peripherals to a Portable Computer
 - Install or Remove Portable Computing Device Drives
 - Install or Remove PCMCIA Cards
 - Install or Remove Mini-PCI Cards
 - Install or Add Memory to a Portable Computing Device
 - Connect PDAs to Computers
- **Performing Preventative Maintenance**
 - Hard Disk Maintenance
 - Perform Printer Maintenance
 - Use a UPS
 - Clean Peripheral Components
 - Clean Internal System Components
 - Dispose of Computer Equipment
- **Troubleshooting Device Problems**

	<ul style="list-style-type: none"> ▪ Correct Monitor Problems ▪ Correct Input Device Problems ▪ Correct Adapter Card and PC Card Problems ▪ Correct Hard Drive Problems ▪ Correct Internal Removable Media Drive Problems ▪ Correct CD or DVD Drive Problems ▪ Correct Printer Problems ○ Troubleshooting System Problems <ul style="list-style-type: none"> ▪ Correct Network Connection Problems ▪ Correct Modem Problems ▪ Correct Power Problems ▪ Correct Boot Problems ▪ Correct Memory Problems ▪ Correct System Board Problems ▪ Correct Portable System Problems ○ Diagnose System Problems
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207 ADVANCED OPERATING SYSTEMS

15 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files
Course Description	<p>Advanced Operating Systems shows users how to use the advanced settings of the windows operating system, in order to be more professional in the use of the windows operating system as a user.</p>
Course Content	<ul style="list-style-type: none"> ○ WORKING WITH THE CONTROL PANEL ○ UNDERSTANDING THE CONTROL PANEL <ul style="list-style-type: none"> ▪ About the Control Panel ▪ Displaying the Control Panel ▪ Using the Category View ▪ Switching Between Category and Classic Views ▪ Using the Classic View ○ MODIFYING APPEARANCE AND T HEMES <ul style="list-style-type: none"> ▪ About Appearance and Themes ▪ Changing the Computer's Theme ▪ Changing the Desktop Background ▪ Choosing a Screen Saver ▪ Changing the Screen Resolution ▪ Modifying Display Properties ▪ Modifying Folder Options ▪ Customizing the Taskbar and Start Menu ○ CONFIGURING INTERNET AND NETWORK SETTINGS <ul style="list-style-type: none"> ▪ About Network and Internet Connections ▪ Setting or Changing Internet Connections ▪ Connecting to a Private Network ▪ Configuring Internet Options ▪ Displaying Network Connections ○ ADDING OR REMOVING PROGRAMS <ul style="list-style-type: none"> ▪ About Adding or Removing Programs ▪ Changing or Removing Programs ▪ Adding Programs ▪ Adding or Removing Windows Components ○ CHANGING SOUNDS <ul style="list-style-type: none"> ▪ About Sounds, Speech, and Audio Devices

- Adjusting the System Volume
- Changing the Sound Scheme
- Changing Speaker Settings
- Changing Sound and Audio Device Properties
- Changing Speech Properties
- **SCHEDULING PERFORMANCE AND MAINTENANCE**
 - About Performance and Maintenance
 - Viewing Computer Information
 - Adjusting Visual Settings
 - Freeing up Hard Disk Space
 - Backing up Data
 - Optimizing your Hard Disk
 - Using Administrative Tool
 - Scheduling Tasks
 - Setting Power Options
- **MODIFYING HARDWARE SETTINGS**
 - Setting Mouse Properties
 - Setting Keyboard Properties
 - Using Phones and Modems
 - Adding Scanners and Cameras
- **MODIFYING USER ACCOUNTS**
 - About User Accounts
 - Changing an Account Name
 - Changing an Account Password
 - Removing an Account Password
 - Changing an Account Picture
 - Changing an Account Type
 - Changing the Passport Account
 - Deleting an Account
 - Creating a New Account
 - Changing the way Users Log On or Off
- **MODIFYING DATE, TIME, TIME ZONE, LANGUAGE, AND REGIONAL OPTIONS**
 - About Date, Time, Language, and Regional Options
 - Changing the Date and Time
 - Changing the Format of Numbers, Dates, and Times
 - Adding Other Languages
- **APPLYING ACCESSIBILITY OPTIONS**
 - About Accessibility Options
 - Adjusting Text and Screen Color
 - Configuring Windows for Accessibility Users
 - Setting Accessibility Options
- **WORKING WITH PRINTERS AND OTHER HARDWARE**
- **ADDING AND MANAGING PRINTERS**
 - Connecting to a Network Printer
 - Viewing Printer Properties
 - Sharing a Printer
 - Deleting a Printer
- **ADDING A SCANNER OR CAMERA**
 - Displaying Installed Scanners or Digital Cameras
 - Installing a Plug and Play Scanner or Digital Camera
 - Installing a Scanner or Digital Camera without Plug and Play
 - Viewing Device Properties
- **ADDING A GAME CONTROLLER**
 - Installing a Game Port Game Controller
 - Installing a USB Game Controller
 - Testing a Game Controller
 - Calibrating a Game Controller

- Removing a Game Controller
- **ADDING A MODEM**
 - Displaying Installed Modems
 - Installing a Modem
 - Viewing Modem Properties
 - Removing a Modem
- **MODIFYING MOUSE SETTINGS**
 - Modifying Button Options
 - Selecting a Pointer
 - Modifying Pointer Options
 - Viewing Mouse Hardware Properties
- **MODIFYING KEYBOARD SETTINGS**
 - Modifying Speed Options
 - Viewing Keyboard Hardware Properties
- **MANAGING HARDWARE**
 - Using the Add Hardware Wizard
 - Using the Device Manager
 - Modifying Hardware Profiles
- **WORKING WITH MULTIMEDIA**
- **PLAYING AND MANAGING MUSIC**
 - Opening Windows Media Player
 - Playing CDs
 - Using the Media Guide
 - Copying Music from a CD
 - Using the Media Library
 - Creating Playlists
 - Listening to Internet Radio Stations
 - Copying Music to a CD or Device
- **TAKING AND MANAGING DIGITAL PHOTOS**
 - Using the Scanner and Camera Wizard
 - Using the My Pictures Folder
 - Viewing Pictures with the Windows Picture and Fax Viewer
 - Editing a Digital Photo
- **NETWORKING**
 - Setting up a Network
 - About Workgroups
 - Using the Network Setup Wizard
 - Making New Connections
 - Making a Local Area Connection
 - Making a Dial-up or Virtual Private Network Connection
 - Making a Direct Connection Making an Incoming Connection

208 ADVANCED WORD PROCESSING

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Word Processing
Course Description	<p>Advanced Word Processing shows users how to use the advanced settings and the advanced options of the formatting creating tables and objects inside the MS Word software, to create a more professional word document to be represented professionally in a more presentable format.</p>
Course Content	<ul style="list-style-type: none"> ○ EDITING TEXT <ul style="list-style-type: none"> ▪ Text effect options ▪ Animated text effect options ▪ Automatic text correction options ▪ Automatic text formatting options ▪ Automatic text entry options ▪ Text wrapping options ▪ Text orientation options ▪ Text design gallery options ▪ PARAGRAPHS ▪ Paragraph shading options ▪ Paragraph border options ▪ Paragraphs widow and orphan controls ▪ Creating new character or paragraph styles ▪ Modifying existing character or paragraph styles ▪ Outline options ○ TEMPLATES <ul style="list-style-type: none"> ▪ Changing formatting and layout options within a template ▪ Creating a new template based on an existing document or template ○ COLLABORATIVE EDITING <ul style="list-style-type: none"> ▪ Adding or removing text comments ▪ Editing text comments ▪ Using highlighting options to track changes within a document ▪ Accepting or rejecting changes within a document ○ LAYOUT ○ MASTER DOCUMENTS <ul style="list-style-type: none"> ▪ Creating a new Master Document ▪ Creating a subdocument based on heading styles ▪ Adding or removing subdocuments within a Master Document ○ TABLE OF CONTENTS <ul style="list-style-type: none"> ▪ Creating a Table of Contents ▪ Updating and modifying an existing Table of Contents ▪ Applying formatting options to a Table of Contents ○ SECTIONS <ul style="list-style-type: none"> ▪ Creating sections within a document ▪ Deleting section breaks within a document ○ COLUMNS <ul style="list-style-type: none"> ▪ Creating multiple column layouts ▪ Modifying column layouts ▪ Modifying column width and spacing ▪ Inserting a column break ▪ Deleting a column break

- **DOCUMENT ORGANISATION**
- **REFERENCING**
 - Adding or deleting a bookmark
 - Creating or editing an index
 - Creating or deleting a cross-reference
- **FIELD CODES**
 - Inserting a field code
 - Editing or updating a field code entry
 - Locking or unlocking a field
 - Deleting a field code
- **FOOTNOTES /ENDNOTES**
 - Creating or deleting footnotes and endnotes
 - Modifying existing footnotes or endnotes
 - Modifying format and positioning of footnotes or endnotes
- **SECURITY**
 - Adding password protection to a document
 - Removing password protection from a document
- **DOCUMENT ELEMENTS**
- **TABLES**
 - Using merge and split cell options with in a table
 - Converting tabbed text into a table
 - Sorting data within a table
 - Performing addition calculations on a numeric list within a table
- **FORMS**
 - Creating and editing a form
 - Using form field options
 - Deleting fields within a form
 - Protecting a form
- **TEXT BOXES**
 - Inserting or deleting Text Boxes
 - Editing, moving and re-sizing Text Boxes
 - Applying border and shading options in Text Boxes
 - Linking text boxes
- **SPREADSHEETS**
 - Modifying an embedded worksheet within a document
 - Creating a chart from a table or pasted worksheet data
 - Modifying chart formatting
 - Positioning a chart within a document
- **GRAPHICS**
 - Modifying image borders
 - Creating a simple drawing using the drawing options
 - Using pre-defined shapes options
 - Sending pre-defined shape to back or front
 - Sending pre-defined shapes in front of or behind text
 - Grouping or ungrouping pre-defined shapes
 - Adding a watermark to a document
- **CAPTIONS**
 - Adding or updating a caption to an image, table or worksheet
 - Applying a numbered caption to an image, figures, table or worksheet
 - Using automatic caption options
- **SPECIAL TOOLS**
- **MAIL MERGE**
 - Using mail merge

	<ul style="list-style-type: none"> ○ MACROS <ul style="list-style-type: none"> ▪ Recording a macro ▪ Copying a macro ▪ Running a macro ▪ Assigning a macro to a custom button on a toolbar ○ PRINTING ○ PREPARING TO PRINT <ul style="list-style-type: none"> ▪ Printing only odd numbered pages ▪ Printing only even numbered pages ▪ Printing a defined selection ▪ Printing a defined number of pages per sheet
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209 ADVANCED SPREADSHEETS

18 Hours

Course Requirements

	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Spreadsheets
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Course Description

	<p>Advanced Spreadsheets show users how to work with a spreadsheet application using the advanced options and mathematical functions that allows user to make some of the more difficult equations and calculations that concerns accountants and other employees who use spreadsheets.</p>
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Course Content

	<ul style="list-style-type: none"> ○ EDITING DATA <ul style="list-style-type: none"> ▪ Naming cell range(s) within a worksheet ▪ Applying automatic formatting to a cell range ▪ Creating custom number formats ▪ Using conditional formatting options ▪ Using Paste Special options ▪ Importing a text file and delimit by comma, space or tab ○ DISPLAY <ul style="list-style-type: none"> ▪ Freezing row and /or column titles ▪ Hiding and un-hiding rows or columns ▪ Hiding and un-hiding worksheets ▪ Using sub-totalling features ▪ Using one-input or two-input Data tables / What-if tables ○ PROTECTION <ul style="list-style-type: none"> ▪ Protecting and un-protecting a worksheet with a password ▪ Protecting and un-protecting designated cells with a password ○ SECURITY <ul style="list-style-type: none"> ▪ Adding password protection to a workbook ▪ Removing password protection from a workbook ○ DATA HANDLING ○ SORTING <ul style="list-style-type: none"> ▪ Sorting data by multiple columns ▪ Performing custom sorts ○ QUERYING/FILTERING <ul style="list-style-type: none"> ▪ Creating a single or multiple criteria query using available options ▪ Using advanced query / filter options
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- **LINKING**
 - Linking data or a chart within a worksheet
 - Linking data and a chart between worksheets [within a workbook]
 - Linking data or a chart between workbooks
 - Linking data or a chart into a word processing document
 - Consolidating data in adjacent worksheets using a 3D sum function
- **TEMPLATES**
 - Using a template
 - Editing a template
- **CHARTS**
 - The Chart Wizard
 - Changing the angle of pie chart slices
 - Formatting chart axis numbers or text
 - Re-positioning the title, legend, or data labels within a chart
 - Exploding all the segments in a pie chart
 - Deleting a data series in a chart
 - Modifying the chart type for a defined data series
 - Widening the gap between columns or bars in a 2D chart
 - Inserting an image in a 2D chart
- **FUNCTIONS**
- **USING FUNCTIONS**
 - Using the Insert Function Utility
 - Using date and time functions: TODAY
 - Using date and time functions: DAY
 - Using date and time functions: MONTH
 - Using date and time functions: YEAR
 - Using mathematical functions: SUMIF
 - Using mathematical functions: SUMPOSITIVE
 - Using mathematical functions: ROUND
 - Using statistical functions: COUNT
 - Using statistical functions: PURECOUNT
 - Using statistical functions: COUNTA
 - Using statistical functions: COUNTIF
 - Using text functions: PROPER
 - Using text functions: UPPER
 - Using text functions: LOWER
 - Using text functions: CONCATENATE
 - Using financial functions: FV
 - Using financial functions: NPV
 - Using financial functions: PMT
 - Using financial functions: PV
 - Using financial functions: RATE
 - Using lookup and reference functions: HLOOKUP
 - Using lookup and reference functions: VLOOKUP
 - Using logical functions: IF
 - Using logical functions: AND
 - Using logical functions: OR
 - Using logical functions: ISERROR
 - Using database functions: DSUM
 - Using database functions: DMIN
 - Using database functions: DMAX
 - Using database functions: DCOUNT
 - Using nested functions
- **ANALYSIS**
- **PIVOT TABLES**
 - Creating a Pivot Table using defined field names
 - Modifying the data source and refreshing a Pivot Table
 - Grouping and displaying data within a Pivot Table by a defined criterion
- **SCENARIOS/VERSIONS**
 - Creating named Scenarios / Versions from defined cell ranges
 - Creating a Scenario summary / Version report

	<ul style="list-style-type: none"> ○ AUDITING <ul style="list-style-type: none"> ▪ Tracing precedent cells within a worksheet ▪ Tracing dependent cells within a worksheet ▪ Displaying all formulas or viewing location of all formulas ▪ Adding or removing worksheet comments ▪ Editing worksheet comments ○ SPECIAL TOOLS ○ MACROS <ul style="list-style-type: none"> ▪ Recording a macro ▪ Running a macro ▪ Assigning a macro to a custom button on a toolbar
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210 ADVANCED DATABASE

18 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Spreadsheets ○ Database
Course Description	<p>Database shows users how to work with a database application to make a good design for a database and use the MS Access to make an E-R Diagram which allows the user to make a good understanding of the database going through design and more and more of the other advanced options.</p>
Course Content	<ul style="list-style-type: none"> ○ TABLE DESIGN ○ FIELDS <ul style="list-style-type: none"> ▪ Applying and modifying data types ▪ Understanding the consequences of modifying data types ▪ Creating and editing a lookup in a field or column ▪ Creating and editing a validation rule in a field or column ▪ Creating and editing an input mask in a field or column ▪ Applying and modifying default values in a field or column ▪ Setting a mandatory data field or column ○ RELATIONSHIPS/JOINS <ul style="list-style-type: none"> ▪ Understanding the basis for creating valid relationships ▪ Creating and modifying a one-to-one or one-to-many relationships ▪ Understanding and modifying many-to-many relationships ▪ Applying inner, outer and self joins ▪ Applying and using referential integrity ▪ Applying automatic deletion of related records ▪ Relating / joining data when designing queries ○ QUERY DESIGN ○ QUERY TYPES <ul style="list-style-type: none"> ▪ Creating and using a query to update data in a table ▪ Creating and using a query to delete records in a table ▪ Creating and using a query to save the selected information as a table ▪ Appending records to a table using a query ○ QUERY FORMULAS <ul style="list-style-type: none"> ▪ Grouping information in a query ▪ Using functions in a query ▪ Using a crosstab query ▪ Using wildcards in a query

- Using arithmetic or logical expressions in a query
- **REFINING A QUERY**
 - Showing duplicates
 - Showing unmatched values
 - Showing highest or lowest range of values in a query
 - Allowing query input from a data prompt (parameter query)
 - Refining queries using Null and NOT values
- **FORM DESIGN**
- **CONTROLS**
 - Creating bound and unbound controls
 - Creating and editing a combo box, list box, check box, option groups
 - Creating arithmetic or logical expression controls on a form
 - Setting sequential order of controls on a form
 - Inserting a data field to appear within a form header or footer
- **SUBFORMS**
 - Creating a subform and linking to parent
 - Modifying the subform to change records displayed
- **REPORT DESIGN**
- **CALCULATIONS**
 - Creating arithmetic or logical calculation controls in a report
 - Calculating percentage calculation control in a report
 - Using formulas and expressions in a report
 - Creating running summaries in a report
- **PRESENTATION**
 - Inserting a data field to appear within report header or footer
 - Forcing page breaks for groups on reports
- **MACROS**
- **RECORDING & ASSIGNING MACROS**
 - Recording a macro
 - Running a macro
 - Assigning / attaching a macro to a form, report, control
- **IMPORT, EXPORT AND LINK DATA**
- **DATA MANAGEMENT**
 - Importing text, spreadsheet, csv, dBASE or Paradox files
 - Exporting data in spreadsheet, txt, dBASE or Paradox formats
 - Linking external data to a database

3. PROFESSIONAL TRACK

301 PROGRAMMING USING C#

24 Hours

Course Requirements	
	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Information and Communication ○ Introduction to Programming (Programming Fundamentals)
Course Description	
	<p>The goal of this course is to provide students with the knowledge and skills they need to develop C# applications for the Microsoft® .NET Platform. The course focuses on C# program structure, language syntax, and implementation details.</p>
Course Content	
	<ul style="list-style-type: none"> ○ Overview of the Microsoft .NET Platform ○ Overview of C# ○ Using Value-Type Variables ○ Statements and Exceptions ○ Methods and Parameters ○ Arrays ○ Essentials of Object-Oriented Programming ○ Using Reference-Type Variables ○ Creating and Destroying Objects ○ Inheritance in C# ○ Aggregation, Namespaces, and Advanced Scope ○ Operators and Events ○ Properties and Indexers ○ Attributes

302 RELATIONAL DATABASE FUNDAMENTALS – INTRODUCTION TO SQL

24 Hours

Course Requirements	
	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Database ○ Information and Communication
Course Description	
	<p>This course is aimed at those who have no prior database skills. It presents concept of database and relational database environment as well as some product samples</p>
Course Content	
	<ul style="list-style-type: none"> ○ Database Introduction ○ Database management systems/ Data models/ transaction management ○ Database design concepts ○ ER diagrams and their notations are ○ Data Base Normalization ○ Database design Lab ○ Structured Query Language Fundamentals ○ Structured Query Language lab ○ Advanced SQL

- Creating and Managing Database Objects
- Database Object lab
- Data Dictionary, Data access and security
- Data Dictionary lab
- Programming structure, UDT, UDF
- Programming structure, UDT, UDF lab
- This course includes labs and quizzes

303 DEVELOPING MICROSOFT ASP.NET WEB APPLICATIONS USING VISUAL STUDIO .NET

24 Hours

Course Requirements

- Basic Concepts of Information Technology
- Using Computers and Managing Files
- Information and Communication
- Web Publishing using FrontPage
- Introduction to Programming (Programming Fundamentals)

Course Description

This course will teach Microsoft® C#® programmers and beginning Web developers the fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft C# .NET. This course focuses on using the Microsoft Visual Studio® .NET environment and the Microsoft .NET platform to create an ASP.NET Web application that delivers dynamic content to a Web site.

Course Content

- Overview of the Microsoft .NET Framework
- Using Microsoft Visual Studio .NET
- Using Microsoft .NET-Based Languages
- Creating a Microsoft ASP.NET Web Form
- Adding Code to a Microsoft ASP.NET Web Form
- Tracing in Microsoft ASP.NET Web Applications
- Validating User Input
- Creating User Controls
- Accessing Relational Data Using Microsoft Visual Studio .NET
- Accessing Data with Microsoft ADO.NET
- Calling Stored Procedures with Microsoft ADO.NET
- Reading and Writing XML Data
- Consuming and Creating XML Web Services
- Managing State
- Configuring, Optimizing, and Deploying a Microsoft ASP.NET Web Application
- Securing a Microsoft ASP.NET Web Application

304 SCIENTIFIC RESEARCH TOOLS (INTRODUCTION TO SPSS)

18 Hours

Course Requirements

- Basic Concepts of Information Technology
- Using Computers and Managing Files
- Spreadsheets

Course Description

SPSS is a software package used for conducting statistical analyses, manipulating data, and generating tables and graphs that summarize data. Statistical analyses range from basic descriptive statistics, such as averages and frequencies, to advanced inferential statistics, such as regression models, analysis of variance, and factor analysis. SPSS also contains several tools for manipulating data, including functions for recoding data and computing new variables as well as merging and aggregating datasets. SPSS also has a number of ways to summarize and display data in the form of tables and graphs.

Course Content	<ul style="list-style-type: none"> ○ Overview <ul style="list-style-type: none"> ▪ Introduction to SPSS ▪ Overview of SPSS for Windows ○ Entering Data in SPSS <ul style="list-style-type: none"> ▪ Starting SPSS ▪ The Data Editor ▪ The Syntax Editor ▪ The Output Viewer ▪ Importing Data from Excel Files ▪ Importing Data from ASCII Files ○ Modifying and Organizing Data in SPSS <ul style="list-style-type: none"> ▪ Creating and Defining Data ▪ Inserting Cases and Variables ▪ Computing New Variables ▪ Recoding Variables ▪ Sorting Cases ▪ Selecting Cases ○ Listing Cases
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305 SCIENTIFIC RESEARCH TOOLS (INTRODUCTION TO MATLAB)

24 Hours

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Spreadsheets ○ Introduction to Programming (Programming Fundamentals)
Course Description	<p>Numerical Computing with MATLAB is an introductory course in numerical methods, Matlab, and technical computing. The emphasis is on informed use of mathematical software. We want you to learn enough about the mathematical functions in MATLAB that you will be able to use them correctly, appreciate their limitations, and modify them when necessary to suit your own</p>
Course Content	<ul style="list-style-type: none"> ○ Introduction to MATLAB ○ Linear equations ○ Interpolation ○ Zero finding ○ Least squares ○ Quadrature ○ Ordinary differential equations ○ Random numbers ○ Fourier analysis ○ Eigenvalues and singular values ○ Partial differential equations

306 PROJECT MANAGEMENT USING MICROSOFT PROJECT

18 Hourse

Course Requirements	<ul style="list-style-type: none"> ○ Basic Concepts of Information Technology ○ Using Computers and Managing Files ○ Spreadsheets ○ Introduction to Programming (Programming Fundamentals)
Course Description	<p>Microsoft Project is Microsoft's Answer to Project Management, It Provides all the tools you need for effective planning, tracking, problem solving, sharing and completing a project in keeping with conventional management principles and practices.</p>

It can be used for a project of any size. It simply provides a framework to start with, as well as the mean of organize and manage effectively. It's like having a project management assistant.

Course Content

- Course basics
- Introduction to Microsoft Project 2003
- Defining the Project
- Tasks
- Resources
- Views
- Printing Reports