**Computer Principles (Lab)**

**TS1 (60 Hours)**

***(PART ONE: MICROSOFT WORD)***

**Course Description:**

Microsoft Word 2010 is a sophisticated word processing program that helps student quickly and efficiently author and format all the business and personal documents students are ever likely need. Students can use Word to:

* Create professional-looking documents that incorporate impressive graphics such as charts and diagrams.
* Give documents a consistent look by applying styles and themes that control thefont, size, color, and effects of text and the page background.
* Store and reuse ready-made content and formatted elements such as coverpages and sidebars.
* Create personalized e-mail messages and mailings to multiple recipients without repetitive typing.
* Make information in long documents accessible by compiling tables of contents, indexes, and bibliographies.
* Safeguard documents by controlling who can make changes and the types of changes that may be made, as well as by removing personal and confidential information.

**Learning Outcomes:**

After the completion of this course, student should be able to:

* Explore Word 2010.
* Edit and Proofread Text.
* Change the Look of Text.
* Organize Information in Columns and Tables.
* Add Simple Graphic Elements.
* Preview, Print, and Distribute Documents.
* Insert and Modify Diagrams.
* Insert and Modify Charts.
* Use Other Visual Elements.
* Organize and Arrange Content.
* Create Documents for Use Outside of Word.
* Explore More Text Techniques.
* Use Reference Tools for Longer Documents.
* Work with Mail Merge.

**Chapter One**

**Learning objectives:**

1. Sharing and Maintaining Documents.

**Contents:**

* 1. Apply Different Views to a Document.
  2. Apply protection to a Document.
  3. Manage Document versions
  4. Share Documents.
  5. Save a Document.
  6. Apply a Template to a Document.

**Chapter Two**

**Learning objectives:**

1. Formatting content.

**Contents:**

2.1 Apply Font and Paragraph attributes.

2.2 Navigate and Search Through a Document.

2.3 Apply Indentation and Tab settings tp paragraphs.

2.4 Apply Spacing settings to teaxt and paragraphs.

2.5 Create tables.

2.6 Manipulate tables in a Document.

2.7 Apply Bullets to a Document.

**Chapter Three**

**Learning objectives:**

1. Applying page layout and reusable content.

**Contents:**

3.1 Apply and Manipulate page setup settings

3.2 Apply themes.

3.3 Create and Manipulate page backgrounds.

3.4 Create and Modify Headers and Footers.

**Chapter Four**

**Learning objectives:**

1. Including Illustrations and Graphics in a Document.

**Contents:**

4.1 Insert and format pictures in a Document.

4.2 Insert and Format shapes, wordart and smart art.

4.3 Insert and Format Clip Art.

4.4 Apply and manipulate text boxes.

**Chapter Five**

**Learning objectives:**

1. Proofreading Documents.

**Contents:**

5.1 Validate content by using spelling and Grammar checking options.

5.2 Configure Autocorrect settings.

5.3 Insert and modify Comments in a Document.

**Chapter Six**

**Learning objectives:**

1. Applying References and Hyperlinks.

**Contents:**

6.1 Apply a Hyperlink.

6.2 Create Endnotes and footnotes.

6.3 Create a table of contents.

**Chapter Seven**

**Learning objectives:**

1. Performing Mail Merge Operations.

**Contents:**

7.1 Set up Mail Merge.

7.2 Execute Mail Merge

***(PART TWO: MICROSOFT EXECEL 2010)***

**Course Description:**

**This course** aims to be a way to explain the use and advantages of the powerful electronic spreadsheet Excel, and explain examples and applications that will facilitate our daily work. Using the web name, the first thing that we will do is explain what is Excel.

Excel is a tool belonging to the office suite of software called electronic spreadsheet, in that electronic spreadsheet you can write, store, manipulate, calculate and organize any type of text or numeric information.

Excel is an electronic spreadsheet developed by Microsoft that is in the package of tools applications called Office, the Excel software office spreadsheet is the electronic spreadsheet most extended and used on a global level, today's any work of an engineer, financial, mathematical, physical or accounting would be very different without the Excel spreadsheet application.

An electronic spreadsheet is defined as computer software that contains columns, rows and cells, where the intersection of columns and rows are the cells, within each cell is the place where we can write any kind of information or data that later will be treated, each cell it’s unique in the entire spreadsheet.

The main advantage of using electronic spreadsheets is that it is possible to interconnect a cell with others through the use of functions, rules or formulas, so that when the value of one cell change, the electronic spreadsheet will automatically recalculate and update the values of the other cells. This advantage was the origin and the basis for advancing about the development of the electronic spreadsheets, because once in the absence of such a tool, the work to recalculate different scenarios for a mathematical, physical or financial model was represent an enormous effort, time and the risk of falling into an error during the calculation. This problem was solved through the development and use of electronic spreadsheets which to change any value of the model in less than 1 second without error recalculates the entire model by providing a completely reliable result.

**Learning Outcomes:**

After the completion of this course, student should be able to:

* Setting Up a Workbook.
* Working with Data and Excel Tables.
* Performing Calculations on Data.
* Changing Workbook Appearance.
* Focusing on Specific Data by Using Filters.
* Reordering and Summarizing Data.
* Combining Data from Multiple Sources.
* Analyzing Alternative Data Sets.
* Creating Dynamic Worksheets by Using PivotTables.
* Creating Charts and Graphics.
* Printing.

**Chapter One**

**Learning objectives :**

1. Managing the Worksheet Environment

**Contents:**

1.1 Navigate Through a Worksheet.

1.2 Print a Worksheet or Workbook.

1.3 Personalize the Excel Environment.

**Chapter Two**

**Learning objectives :**

1. Creating Cell Data.

**Contents:**

2.1 Construct Cell Data

2.2 Apply Auto Fill.

2.3 Apply and Manipulate Hyperlinks.

**Chapter Three**

**Learning objectives :**

1. Formatting Cells and Worksheets

**Contents:**

3.1 Apply and Modify Cell Formats.

3.2 Merge or Split Cells.

3.3 Create Row and Column Titles.

3.4 Hide or Unhide Rows and Columns.

3.5 Manipulate Page Setup Options for Worksheets.

3.6 Create and Apply Cell Styles.

**Chapter Four**

**Learning objectives :**

1. Managing Worksheets and Workbooks.

**Contents:**

4.1 Create and Format Worksheets.

4.2 Manipulate Window Views.

4.3 Manipulate Workbook Views.

**Chapter Five**

**Learning objectives :**

1. Applying Formulas and Functions.

**Contents:**

5.1 Create Formulas.

5.2 Enforce Precedence.

5.3 Apply Cell References in Formulas.

5.4 Apply Conditional Logic in Formulas.

5.5 Apply Named Ranges in Formulas.

5.6 Apply Cell Ranges in Formulas.

**Chapter Six**

**Learning objectives :**

1. Presenting Data Visually.

**Contents:**

6.1 Create Charts Based on Worksheet Data.

6.2 Apply and Manipulate Illustrations.

6.3 Create and Modify Images.

6.4 Apply Sparklines.

**Chapter Seven**

**Learning objectives :**

1. Sharing Worksheet Data with Other Users.

**Contents:**

7.1 Share Spreadsheets.

7.2 Manage Comments.

**Chapter Eight**

**Learning objectives :**

1. Analyzing and Organizing Data.

**Contents:**

8.1 Filter Data.

8.2 Sort Data.

8.3 Apply Conditional Formatting.

***(PART THREE: MICROSOFT POWERPOINT)***

**Course Description:**

Microsoft PowerPoint is a software product used to perform computer-based presentations. There are various circumstances in which a presentation is made: teaching a class, introducing a product to sell, explaining an organizational structure, etc.

There are two main kinds of presentations you can deliver: before an audience or not. The preparation and the actual delivery of each are quite different. Before getting into the details of each, we will first take a look at the software and analyze what it has to offer.

**Learning Outcomes:**

After the completion of this course, student should be able to:

* Manage the PowerPoint Environment.
* Create a Slide Presentation.
* Work with Graphical and Multimedia Elements.
* Create Charts and Tables.
* Apply Transitions and Animations.
* Collaborate on Presentations.
* Prepare Presentations for Delivery.
* Deliver Presentations.

**Chapter One**

**Learning objectives :**

1. Managing the PowerPoint Environment.

**Contents:**

1.1 Adjust Views.

1.2 Manipulate the PowerPoint Window.

1.3 Configure the Quick Access Toolbar.

1.4 Configure PowerPoint File Options.

**Chapter Two**

**Learning objectives :**

1. Creating a Slide Presentation.

**Contents:**

2.1 Construct and Edit Photo Albums.

2.2 Apply Slide Size and Orientation Settings.

2.3 Add and Remove Slides.

2.4 Format Slides.

2.5 Enter and Format Text.

2.6 Format Text Boxes.

**Chapter Three**

**Learning objectives :**

1. Working with Graphical and Multimedia Elements.

**Contents:**

3.1 Manipulate Graphical Elements.

3.2 Manipulate Images.

3.3 Modify WordArt and Shapes.

3.4 Manipulate SmartArt.

3.5 Edit Video and Audio Content.

**Chapter Four**

**Learning objectives :**

1. Creating Charts and Tables.

**Contents:**

4.1 Construct and Modify Tables.

4.2 Insert and Modify Charts.

4.3 Apply Chart Elements.

4.4 Manipulate Chart Layouts.

4.5 Manipulate Chart Elements.

**Chapter Five**

**Learning objectives :**

1. Applying Transitions and Animations.

**Contents:**

5.1 Apply Built-In and Custom Animations.

5.2 Apply Effect and Path Options.

5.3 Manipulate Animations.

5.4 Apply and Modify Transitions Between Slides.

**Chapter Six**

**Learning objectives :**

1. Collaborating on Presentations.

**Contents:**

6.1 Manage Comments in Presentations.

6.2 Apply Proofing Tools.

**Chapter Seven**

**Learning objectives :**

1. Preparing Presentations for Delivery.

**Contents:**

7.1 Save Presentations.

7.2 Share Presentations.

7.3 Print Presentations.

7.4 Protect Presentations.

**Chapter Eight**

**Learning objectives :**

1. Delivering Presentations.

**Contents:**

8.1 Apply Presentation Tools.

8.2 Set Up Slide Shows.

8.3 Set Presentation Timing.

8.4 Record Presentations