BISMARCK

TECHNOLOGY & LEARNING INSTITUTION LIMITED

Every Life, Every Moment, Every Day. A New Discovery...

BISMARCK SPONSORSHIP ONLINE TUITION COURSES

TABLE OF CONTENTS

MICROSOFT ACCESS *pg 1*
MICROSOFT WORD *pg 8*
MICROSOFT EXCEL *pg 14*
MICROSOFT POWERPOINT *pg 20*
QUICKBOOKS *pg 26*
BASIC COMPUTER SKILLS *pg 32*
WEB DESIGN *pg 37*
FOOD TECHNOLOGY *pg 44*
E-AGRICULTURE *pg 52*
SOLAR ENERGY SYSTEMS *pg 57*

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life. Every Moment. Every Day. A New Discovery...

MICROSOFT ACCESS COURSE

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Microsoft Access?

Microsoft Access mostly shortened to **MS Access** is a DBMS (database management system) from Microsoft that joins together the relational Microsoft Jet Database Engine with software development tools and an easy to understand graphical user interface.

MS Access is a member of the Microsoft Office suite of enterprise applications, it is either included in the Professional and higher editions or sold separately. Microsoft Access stores user's data in its own format which is based on the Microsoft Access Jet Database Engine. It can also import or link directly to various data that is stored in other applications and databases.

Software developers, power users, and data architects can make use of Microsoft Access to design and develop application software like in other Microsoft Office applications, Microsoft Access is supported by Visual Basic Applications (VBA) which is an object-oriented software development language that can generally reference a variety of objects including the legacy Data Access Objects (DAO), ActiveX Data Objects, and many other components of ActiveX. Visual objects in MS Access are used in display forms and reports expose their various properties and methods in the Visual Basic Application programming environment, and VBA code modules can declare and call various Windows operating system operations.

In addition to MS Access having its own database storage file, Microsoft Access also may also be used as the 'front-end of a program while other products would act as the 'back-end' tables, such as the Microsoft SQL Server and in non-Microsoft products such as Sybase and Oracle. Multiple backend sources can be used by the Microsoft Access Jet Database (ACCDB and MDB formats). In the way, some applications such as Visual Basic, Visual Studio .Net or ASP.NET will use the Microsoft Access database format for its data tables and queries. Microsoft Access may also be part of a more large and complex solution, where it may be combined together with other technologies such as Microsoft Outlook, Microsoft Excel, Microsoft Word, Microsoft PowerPoint, and ActiveX controls.

Microsoft Access tables offer support for a variety of standard field types, indices, and referential integrity which includes lots of cascading updates and deletes. MS Access also comes with a query interface, display forms and enter data, and reports for printing.

Components of Microsoft Access

Below are the major components of MS Access:

1. Tables:
Tables are responsible for storing information within the database. Tables in access look similar to tables in Excel. They contain columns and rows. Each column has a name at the top, and each row has a number.

2. Relationships:
Relationship gives meaning to tables, It is essentially the "connections" or "bonds" that are formed between tables. Tables can be related in one of three ways: one-to-one, one-to-many and many-to-many.

3. Forms:
In Access, a form is a database object that can be used to create a user interface for a database application.

4. Reports:
Once data is entered into the database, you can run reports to view, summarize or format various information. Reports cannot be edited as forms can, but you can pick and choose the information you want to compare before creating the report.

5. Queries:
Queries are requests for information from the database. When querying you can sort, calculate, filter, update data and more based on the results you are looking for.

6. Macros:
This enables certain tasks to be automated, Macros perform a series of actions based on how you enter them. You can create macros that will open forms, change values, run queries and even run other macros.

Features of Microsoft Access

Some of the features include:

1. Queries:
The Query Wizard is another feature for fetching data. When a user clicks the button for this feature, Access creates SQL statements in response to user input in the Wizard's screens. Access users rely on this tool and the query grid for retrieving their stored data. The SQL window is a feature of Access that offers an alternative to the query grid. Users familiar with SQL syntax can enter their statements in this window, then run the statements by clicking the "Run" button on the toolbar.

2. Reports:
he Report Wizard is a feature that creates a report from a selected table or other data source with a single click. Users click a table in the navigation pane, then click the Report Wizard's icon in the toolbar to execute the wizard, which prompts users for parameters for defining the report.

3. Import And Export:
This feature is for importing existing data, it is the set of tools under the "External Data" menu heading. One of these tools is labeled "Excel." By clicking it, Access users display a wizard that guides them through the process of moving data from an Excel spreadsheet to their Access database.

4. Data Entry:
An intuitive way of entering data into an Access database is manual entry. An essential feature of Access that users choose for this operation is the tool for creating tables. Users click a toolbar button to create a new table, then define column labels for the fields in the table.

Benefits of Microsoft Access

1. It is ideal for individual users and smaller teams.

2. MS Access is easier to use than regular client-server databases.

3. It allows you to import and export to other Microsoft Office and other databases.

4. It presents you with ready to use templates for regular users to create and publish data.

5. It offers you a user-friendly feature for assistance.

6. MS Access allows software developers to create custom solutions using codes written in VBA.

7. MS Access allows output Reports to be presented in PDF format.

8. It allows for the building and publishing of Web databases effortlessly.

9. MS Access offers a quick and easy way to create database systems.

10. Microsoft Access presents users with a user-friendly application through its comprehensive programming language VBA

11. MS Access produces a flexible and easily scalable database system.

12. MS Access is well-known so you can get help and support easily.

Why Study Microsoft Access?

1. MS Access is easier to use than regular client-server databases.
2. MS Access offers a quick and easy way to create database systems.
3. MS Access is very useful for business of every size so knowledge of it is a very big benefit.
4. Job opportunities and career advancement.

Microsoft Access Course Outline

MS Access - Introduction
MS Access - Overview
MS Access - RDBMS
MS Access - Objects
MS Access - Create Database
MS Access - Data Types
MS Access - Create Tables
MS Access - Adding Data
MS Access - Query Data
MS Access - Query Criteria
MS Access - Action Queries
MS Access - Create Queries
MS Access - Parameter Queries
MS Access - Alternate Criteria
MS Access - Relating Data
MS Access - Create Relationships
MS Access - Wildcards
MS Access - Calculated Expression
MS Access - Indexing
MS Access - Grouping Data
MS Access - Summarizing Data
MS Access - Joins
MS Access - Duplicate Query Wizard
MS Access - Create A Form
MS Access - Modify A Form
MS Access - Navigation Form
MS Access - Combo Box
MS Access - SQL View
MS Access - Formatting
MS Access - Controls & Properties
MS Access - Reports Basics
MS Access - Formatting Reports
MS Access - Built-In Functions
MS Access - Macros
MS Access - Data Import
MS Access - Data Export
MS Access - Video Lectures
MS Access - Exams And Certification

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

MICROSOFT WORD COURSE

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Microsoft Word?

Microsoft Word is a software application developed by Microsoft Inc. which allows users to type, edit, format and process texts and images. It is a word processing software package used to create letters, memos, newspapers, minutes, tables and presentations just to mention a few.

Microsoft Word is also known as **Word or MS-Word.** It is flexible and one of the most used word processing software developed and marketed by Microsoft Inc.

Microsoft Word or MS-Word provides a one-stop solution to all your documentation needs, ranging from a simple letter, to a colorful brochure, an official portfolio for a product, quotation for a service, the list is endless.

Benefits of Microsoft Word

The benefit of Microsoft Word is endless, some of which are:

1. Microsoft Word offers an easy to use navigation pane at the top, so you can see the visual representation.
2. Microsoft Word can easily integrate with other Microsoft Office programs.
3. Microsoft Word offers continuous improvements and upgrades.
4. Microsoft Word lets you create simple word processing documents such as letters, memos, tables, presentations, etc.
5. Microsoft Word offers easy to use templates to help you create numerous complex documentation and presentations such as calendars, greeting cards, brochures, etc.
6. Microsoft Word helps to simplify home and office documentation tasks.
7. It offers an interface for content search and citations.
8. If offers advanced word proofing tools.
9. It comes with robust formatting tools.
10. It works with PDFs.
11. It offers mail merge.
12. It offers real-time collaboration.
13. It offers pre-designed templates ranging from a simple document to brochures, certificates, visiting cards, and invitations.
14. It offers tools to create and customize attractive documents, that are easy to share, print and collaborate on.
15. Microsoft word allows us to save, open and edit documents in other formats that are compatible with word processing applications including PDF formats.
16. It offers easy reading mode and writing mode so that we can change between reading and editing modes of documents easily and smoothly.
17. It allows saving and exporting documents in various formats.

Features of Microsoft Word

The features of Microsoft Word are endless, some of which are:

1. Type, Edit, Search Content, Information, or Material.
2. Bing Search Inclusive
3. Access Credible Sources
4. Add Citations
5. Proofing Tools
6. Create More Impactful Documents
7. Improve Writing Skills
8. Design Documents Using Formatting Tools
9. Edit PDF Files and Contents
10. Mail Merge
11. Find A Feature
12. Simple and Advanced Templates
13. Customized Application Workspace Toolbar Layouts
14. Integrated Graphics Drawing and Image Manipulation
15. Macro Scripting Support
16. Retina Display Support
17. Full-Screen Mode
18. Task Pane
19. Smart Lookup
20. Collaboration Tools and Features
21. Co-Authoring Capabilities
22. Track Changes
23. Commenting and Reply System
24. Skype Integration

Benefits of learning Microsoft Word

1. Extreme Availability: Whether you are working from home, or from your office or even at school, Microsoft Word is one of the most available software programs that is found in almost all computers. Since it is one of the most widely used word-processing software applications in the world you can simply assume that it would be installed on the pc of anyone that you are sharing your documents with, even if they are living across the end of the world. Also, Microsoft Word even gives you the option to create, save, open and edit your document in other formats that can work on other word processing software applications including PDF or on its own early versions, making sure that anyone anywhere in the world would be able to directly access and edit the document you have spent your time and energy into.

2. Integrate with other MS Office programs: A Microsoft Word document could be easily integrated into other MS Office software which makes the sharing of data to be easy as counting the alphabets. If you have a spreadsheet file that is developed with Microsoft Excel, MS Word allows you to easily import that spreadsheet into an existing Microsoft Word document while a document that is developed with Microsoft Word can be easily used in Microsoft Excel, PowerPoint, or on any other Microsoft Office application.

3. Instant help with language: With its very broad and comprehensive dictionary, thesaurus and help with grammar in over 40 different languages, Microsoft Word has the ability to find out spellings, grammar errors, and syntax errors automatically and instantly and it provides provide you with a series of solutions to match the sentence and document that you are working on. What's more, MS Word can also detect the language you are using and automate the corrections in accordance with a setting that lets you combine several languages in a single document.

4. Easy reading and easy writing: MS word lets you change between editing and reading modes of a document smoothly and easily. While read mode offers you the necessary and essential tools for reading with texts stacked in columns, the editing mode lets you create and format a document with a very professional look by joining together texts with images, diagrams, charts, and videos.

5. Easy to collaborate: By turning on your file saving on One Drive or on SharePoint by default, you can collaborate with teams on a single Microsoft Word document or with your friends by sending them a link to the same document, and assigning either viewing or editing permission or both.

Microsoft Word Study

Here we highlight some of the things you will learn in this course:
You will learn:
How to Create Tables, Editing and Formating.
How to Insert Bullets and Numbers,
How to Insert Themes to my document.
How to Insert Graphics and Pictures.
How to Save, Save as and Creating a New Blank document.
How to Crop Pictures using Microsoft word.
How to Landscape, Underline, and Make Sentence Bold.
How to Type and Edit also formatting as well.
How to Insert Symbols using Microsoft word.
Creating, Naming, and Saving a Document.
Formatting (bold, italics, font sizes, aligning text).
Creating lists (bullet vs. numbered).
Line spacing, Creating Columns, Paragraphs.
Inserting a bookmark, Inserting an image.
Hyperlinking, Line spacing, Creating columns.
Find and replace, Grammar and spell checking.
Insert page break, Text alignment, Insert rows.
Merging cells, Changing word direction, Insert header
Insert footer, Insert date printing, File Management.
Font Specification, Header, Footer and Page Numbering, etc.

In The Full Course, you will learn everything you need to know about **Microsoft Word** with **Certification of Completion** to showcase your knowledge and competence.

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

MICROSOFT EXCEL COURSE

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Microsoft Excel?

Microsoft Excel is a powerful spreadsheet tool developed by Microsoft to perform calculations, analysis, tabling and visualization of data and information. It features calculation, graphing tools, pivot tables, and a macro programming language called Visual Basic for Applications. It has been a very widely applied spreadsheet for these platforms, especially since version 5 in 1993.

The first and oldest type of computer spreadsheet was VisiCalc, the name was derived from (for "visible calculator"). It was the first spreadsheet tool for PC users - personal computer users and originally released for Apple II by VisiCorp, then followed by Lotus 1-2-3.

Lotus 1-2-3 was introduced by Lotus Software, it was the standard spreadsheet throughout the 1980s and up to the 1990s and was later discontinued and replaced by Microsoft Excel powered by Microsoft.

Features of Microsoft Excel

Here are some of the features excel offers:

1. Vlookup(): This feature or function helps to search for a particular value in a table.

2. Pie Chart: This feature is used to properly visualize the contribution of certain values to a complete pie diagram.

3. Mixed or Combination Type Charts: This function combines and displays two or more chart types in a single chart.

4. Data Validation: Data validation makes sure that users enter a particular set of values into a cell.

5. IFERROR Function: IFERROR is used to return a result when a formula generates an error and a typical result when no error is found.

6. Conditional Formatting: It allows users to change the format of a cell and allows users to highlight errors and to find important patterns in data.

7. Remove Duplicates: This feature helps to get rid of duplicate information and retain only the original.

8. Data Visualization: Data is the current "big thing", being able to visualize data is one awesome feature of Microsoft Excel.

9. Input Restriction: This feature is used to preserve the validity of data.

10. Built-In Formulae: MS Excel has got many built-in formulae for sum, average, minimum, etc. We can use those formulae as per our needs.

11. Formal Auditing: Using formula auditing we can graphically display or trace the relationships between cells and formulas with blue arrows. We can trace the precedents (the cells that provide data to a specific cell) or the dependents (the cells that depend on the value in a specific cell).

12. Data Filtering: Filtering is a quick and easy way to find and work with a subset of data in a range. A filtered range displays only the rows that meet the criteria you specify for a column. Excel provides two commands for filtering ranges: AutoFilter and Advanced Filter.

AutoFilter: which includes a filter by the selection, for simple criteria

Advanced Filter: for more complex criteria

In the Full course, you will learn everything you need to know about Microsoft Excel from Basics, Advance up to Professional level with Certification of Completion to showcase your knowledge.

Benefits of Microsoft Excel

The benefits are numerous, some of which are:

1. It helps to properly organize information and helps to process data by the use of columns and rows with formulas and graphing tools.

2. Used by Managers, Entrepreneurs, Programmers, Clerks, Accountants, and Book-Keepers to manage the day to day business operations like sales, calculations, organizing information, graphing tools, pivot tables, analysis, presentations, etc.

3. MS Excel can also be used for some advanced calculations, tabulations, sorting and complex computations.

4. It offers easy arrangements and storage of data.

5. Excel offers an analysis of large amounts of data.

6. Excel offers a graphical representation of data.

7. Excel helps to calculate in percentages and offers the application of formulas.

8. Excel helps to create a simple sales analysis report.

9. Excel offers data formatting: such as enter data, edit data, filter data, sort list of data, link data, format numbers, adjust font, data placements, and alignments.

Why Study Microsoft Excel?

1. Increase your Earning Potential: Having excel skills increases your options, it is regarded as a transferable skill which is what any hiring manager perceives as critical.

2. Gain a universal skill: Having this know-how sets you apart from your colleagues who don't have knowledge in Excel. Investment bankers and accountants aren't the only ones who rely on Excel; scientists, teachers, business owners, graphic designers, and so many other people turn to the program for help. Regardless of what you do in the office, chances are there's some way for Excel to help you do your job better; it's just a matter of figuring out what that is.

3. Increase Efficiency: You'll save a ton of time at your job and/or in your personal life, and it's guaranteed to be more accurate than something you could've done by hand.

4. Handles Complex Problems: There's more to excel than most people ever realize, the ability to organize, analyze and forecast data, including handling complex calculations and mathematical functions, using charts and graphics for data visualization are just some of its many awesome capabilities.

Microsoft Excel Course Outline

Microsoft Excel Basics
Microsoft Excel - Getting Started with Excel
Microsoft Excel - Creating and Opening Workbooks
Microsoft Excel - Saving and Sharing Workbooks
Microsoft Excel - Cell Basics
Microsoft Excel - Modifying Columns, Rows, and Cells
Microsoft Excel - Formatting Cells
Microsoft Excel - Worksheet Basics
Microsoft Excel - Page Layout
Microsoft Excel - Printing Workbooks
Microsoft Excel Formulas and Functions
Microsoft Excel - Simple Formulas
Microsoft Excel - Complex Formulas
Microsoft Excel - Relative and Absolute Cell References
Microsoft Excel - Functions
Microsoft Excel Working with Data
Microsoft Excel - Freezing Panes and View Options
Microsoft Excel - Sorting Data
Microsoft Excel - Filtering Data
Microsoft Excel - Groups and Subtotals
Microsoft Excel - Tables
Microsoft Excel - Charts
Microsoft Excel - Sparklines
Microsoft Excel Advanced
Microsoft Excel - Track Changes and Comments
Microsoft Excel - Finalizing and Protecting Workbooks
Microsoft Excel - Conditional Formatting
Microsoft Excel - PivotTables
Microsoft Excel - What-If Analysis
Microsoft Excel Exams and Certification

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

MICROSOFT POWERPOINT COURSE

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What Is Microsoft Powerpoint?

Microsoft PowerPoint is a software application used to present information from simple presentations to complex multimedia presentations and projections. The program was first developed by Robert Gaskins and Dennis Austin in a software company named Forethought Inc. It was first released on April 20, 1987 and was initially launched for only Macintosh users.

Microsot PowerPoint later became a component of the Microsoft Office suite, powered by Microsoft Inc., first offered in 1989 for Macintosh users and in 1990 for Windows users.

Microsoft PowerPoint is one of the many programs that are being run by Microsoft Inc. Powerpoint offers users many ways to present information from simple presentations, charts to complex multimedia presentations.

As far as Microsoft PowerPoint is concerned, it comes out of the box with all of the features and templates you'll need to create and edit presentations. **A Template** is a presentation that is already pre-designed with different styles and designs on it. This option provides an easy way to start a presentation with just a single click.

Features of PowerPoint

Powerpoint has a lot of features that makes it very popular and some of them are:

1. On-Premise & Mobile: PowerPoint 2016 is mostly used on PCs and Macsbooks but it also has mobile native apps for Android, Windows and IOS phones and tablet users. This makes the software to be portable yet very functional and powerful and it enables users to create their presentations from mobile devices and rehearse using them before they appear in front of an audience

2. Customizable Slides: PowerPoint 2016 comes out of the box with templates with default color schemes. But this does not limit users from customizing them or creating their own templates. Also, the users can make their slides to be more engaging to further interest their audience by including animations and sounds, and lots more.

3. Emphasized Points: While using PowerPoint, presenters can highlight certain points of importance during their presentation. They can do this using the application's zoom feature, that lets them zoom in and zoom out of a section of the slide and makes their presentations to be more captivating and fun.

4. Focused Presentation: With PowerPoint, users can speak in front of an audience of any size with confidence. The application displays the slides on the public screen whereas the user is able to view their notes and the next slide on their own computer or mobile device.

5. Shared Projects: PowerPoint files can be saved on the user's OneDrive account. This makes presentation files easily accessible anytime to the user and also lets them share their presentations with their teams or colleagues over the cloud by sending them links. This also lets them work together on a presentation through the PowerPoint online.

Why Study Microsoft Powerpoint?

The following are some of the reasons why you should learn Microsoft Powerpoint

1. PowerPoint is a Reliable Program: Over the years, PowerPoint has gotten a countless number of software developments and updates. No matter the exact requirements that you have for the presentation, PowerPoint is very likely to suit and meet up with your needs. It's not just that PowerPoint is reliable, the software program has also been managed to be up to date with recent and modern requirements and changes in the technology. This means that you can depend on the program to work in a number of conditions and settings.
2 – PowerPoint Is Easy to Share: It is very possible to convert your PowerPoint presentations into many standard formats including PDFs, HTML5, and Microsoft Word documents. While this might seem like a small task to carry out, it has a huge advantage when working with others. It was once the case that many organizational products were not capable of being shared among users. This meant that if you had wanted to share a file with your coworkers, your coworkers would have to install a new program and learn how to go through the new type of file. With PowerPoint, most computers can read and view these files and fortunately many workers have gotten at least little experience working with PowerPoint. As a result, it is very easy to distribute these files.
3. PowerPoint Has Numerous Features: PowerPoint gives users many features that no other presentation software has. While most people are already familiar with the basic features of Microsoft PowerPoint, when a person masters the product, he would be able to create several engaging elements. Also, while many people initially become well versed with PowerPoint as a tool for presentations, the program can also be made used to create graphs, flowcharts, newsletters, and several other creative use cases. Some people even use Microsoft PowerPoint to further strengthen their social media profiles on Facebook, Instagram, and Twitter by creating new images and logos.
4. PowerPoint Macros Can Be Used in Powerful Ways: PowerPoint has several fantastic features by default, but PowerPoint Macros can be developed to run when specific actions have occurred. This lets us use it to create complex interactions with just Microsoft PowerPoint.
5. PowerPoint Is Secure: While presentation tools are an invaluable way to design engaging meetings, they also come with some security risks for some companies. Many companies make sure that policies that state anything that is created by its employees are needed to be kept confidential. Some companies even limit employees from storing company materials on any location other than shared company storage drives. Fortunately, PowerPoint presentations can be stored on shared network drives, which help to avoid the risk of data and information leaks. This is very different from other presentation tools that have cloud-based storage, that can be leaked much more easily.
6. Job Opportunity and Career Advancement.

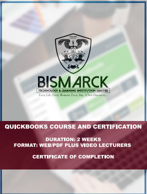
Benefits Of Microsoft Powerpoint

There are lots of benefits of using Microsoft Powerpoint Software for making your slides and presentations and below are some of them.

1. Powerpoint brings more energy and visual impact to your presentations.
2. Microsoft Powerpoint allows you to work with others in your team without having to wait for your turn.
3. Powerpoint allows you to add video files to your presentation to enhance the viewer experience
4. Powerpoint allows you to imagine how your presentation will be just-in-time and allows you to easily and beautifully tell the story.
5. Powerpoint allows you to access your presentations from more locations and across more devices.
6. Powerpoint allows you to create high-quality presentations with awesome graphics.
7. Powerpoint helps you to captivate your audience with new transitions, slides and improved animations.
8. PowerPoint allows you to organize and print your slide presentation more effectively.
9. Powerpoint helps you get things done faster.
10. Powerpoint allows you to work on multiple presentations and on multiple monitors.

Microsoft Powerpoint Course Outline

Microsoft Powerpoint - Introduction
Microsoft Powerpoint - Setting Up Your PowerPoint Environment
Microsoft Powerpoint - Presentation Basics
Microsoft Powerpoint - Text Basics
Microsoft Powerpoint - Themes and Background Styles
Microsoft Powerpoint - Pictures and Clip Art
Microsoft Powerpoint - Working with Lists
Microsoft Powerpoint - Proofing Slides
Microsoft Powerpoint - Viewing and Printing Slides
Microsoft Powerpoint - WordArt and Shapes
Microsoft Powerpoint - Working with Tables
Microsoft Powerpoint - Working with Charts
Microsoft Powerpoint - Inserting Movies
Microsoft Powerpoint - Inserting Sound
Microsoft Powerpoint - Animating Text and Objects
Microsoft Powerpoint - Using Transitions
Microsoft Powerpoint - Using the Slide Master
Microsoft Powerpoint - SmartArt Illustrations
Microsoft Powerpoint - Hyperlinks and Action Buttons
Microsoft Powerpoint - Arrange Objects
Microsoft Powerpoint - Indentation and Line Spacing
Microsoft Powerpoint - Finalize a Presentation and Package for CD
Microsoft Powerpoint - Video Lectures
Microsoft Powerpoint - Exams And Certification



BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

QUICKBOOKS COURSE AND CERTIFICATION

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is QuickBooks Accounting?

QuickBooks is an accounting software built by Intuit Corporation to manage and coordinate various financial transactions within an organization for management decision making.

QuickBooks software is targeted mainly to small and medium-sized accounting needs such as sales, purchases, business payments, bills payments, payroll functions, etc.

QuickBooks Pro Features

1. Track Projects Profitability: Manage work your way by knowing exactly how much money your projects make with dashboards and clear reports. You could also track project details like job and labor cost, expenses, income all in one place. Also, see your profitability based on complete payroll and time costs.

2. Manage Bills: This reduces the stress that comes with keeping up with dates, manage bill status, record payments and create recurring expenses. Pay bills to vendors at once. Create checks on the fly and print when ready. Simplify accounts payable processes with automation and accuracy.

3. Track Miles: Quickbooks enables one to effectively and reliably track miles using the GPS on the smartphone, add trips manually, categorize business and personal trips. Also, get broken down shareable reports of miles driven and potential deductions.

4. Track Income And Expenses: Import transactions from your bank, credit cards, etc. Sort tax transactions into categories.

5. Invoicing And Payments: Use batch invoicing to send and report hundreds on invoicing. Create partial invoices for every stage of the project,track invoice status and send payment reminders.

6. Manage Contractors: Assign vendor payments to 1099 categories, see who you've paid, what you've paid and when.

7. Manage Employees Paydays: Both federal and state payroll taxes are calculated, filed and paid automatically. Automate payroll process.

8. Manage Cashflow: Get customized, data-driven insights to help you make informed decisions. Forecast your cash flow for 30-90 days, also set aside funds for non-negotiable expenses.

9. Multiple Users: Collaborate real-time with other employees, give employees access to specific features and allow for auto-syncing to reduce errors, protect sensitive data with user-level access and share reports without sharing log in.

10. Track Time: Track billable hours a=by employee and clients and add automatically to invoices, enter hours by yourself or give employees access to input their hours.

11. Inventory: Track products, cost of goods and get notified when inventory is low. See what is popular, create purchase orders and manage vendors. Import files from excel and sync with Amazon, Shopify, etc.

12. Reporting: Make better decisions with valuable insights, create customized reports to get important insights specific to the business. Track cash flow and reporting on the dashboard.

13. Synchronized Sales: Sync with mobile apps, accept credit cards anywhere with mobile card readers. Connect to eCommerce tools like Shopify. Automatically calculate taxes on invoices.

14. Estimates: Customize estimates to fit your brand and business needs, accept mobile signatures and instantly see estimate status. Convert estimates into invoices with ease.

15. Capital: Get funding to grow your business, apply from QuickBooks and see loan costs upfront, approved loan funds in 1-2 days to your bank account, save on interest with an early payoff, at any time without penalties.

QuickBooks Online Features

Track sales and expenses

Track payments
Support for Mac23
Smartphone compatible
Profit and Loss and Balance Sheet reports
Print checks
Pay online link in invoices
Document sharing
Mobile receipt capture
Free trial
Excel data export
Enter and manage bill
Comprehensive dashboard
Automated tax calculation
Interactive feed
Create estimates
Create custom invoices
Create and manage invoices
Sync bank data

Automated online banking
Actionable insights

Benefits of QuickBooks

The benefits of QuickBooks are numerous, some of which are:

1. It helps in financial management planning and decision making.
2. It helps to properly account for receivables and payables.
3. It helps in providing quick reports by way of financial statements.
4. It helps in providing adequate financial information for reconciliation.
5. It helps in the inadequate management of funds.
6. It comes with a user-friendly and easy to use interface.
7. It offers features that allow you to efficiently save transactions for every item that has previously been imported to the inventory asset database.
8. It offers automated reporting.
9. It allows users to customize reports the way they want them and schedule them in an organized manner.
10. It offers smart searching filters that speed up browsing in a personalized and auto-complete manner.

In the Full course, you will learn everything you need to know about **QuickBooks Accounting** with **Certification of Completion** to showcase your knowledge/skill gained.

QuickBooks Accounting Course Outline

IQuickBooks - Getting Started
QuickBooks - Using the Homepage
QuickBooks - Using Centers
QuickBooks - Using Forms
QuickBooks - Create Sales Receipts
QuickBooks - Create Invoices
QuickBooks - Receive Payments
QuickBooks - Make Deposits
QuickBooks - Bill Tracker
QuickBooks - Write Checks
QuickBooks - Enter Bills
QuickBooks - Pay Bills
QuickBooks - Home Page Insights
QuickBooks - Using the Reports Center
QuickBooks - Company Snapshot
QuickBooks - Profit and Loss
QuickBooks - Balance Sheet
QuickBooks - Video Lectures
QuickBooks - Exams and Certification

יהוה

I AM THAT I AM

BISMARCK

TECHNOLOGY & LEARNING INSTITUTION LIMITED

Every Life, Every Moment, Every Day. A New Discovery...

BASIC COMPUTER SKILLS COURSE AND CERTIFICATION

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Basic Computer Skills?

A Computer is simply an electronic device that can store, retrieve and process data.
Basic Computer Skills is the study of the fundamental components and uses of a Computer (PC).

A Computer is divided into:
Hardware, which is the physical structure such as Monitor, Keyboard, Mouse, Computer Case, Motherboard; and
Software, which are set of instructions which tell the hardware what to do and how to do it; like the web browsers, word processors, games and file explorers.

Types of Computer

There are many different types of computers which include:

Desktop Computers: These types of computers have the computer case, monitor, keyboard, and mouse.

Laptop Computers: is another type of computer which is battery-powered computer and can be carried along because of its portability and can be used anywhere.

Tablets Computers: which can be handled and are more portable than laptops and use a touch sensitive screen for navigation and typing, e.g. iPad.

Server Computers: We also have server computers that serves up information to other computers on a network.

Features of Computer

It should be noted that Personal Computers come in two styles: PC and Mac, with different look. However, PC is the most commonly used computer and has Microsoft Windows Operating System. Mac (Macintosh) computer on the other hand use the Mac OS X Operation System and are produced by Apple Company.

A PC Computer has some parts which include the Computer Case, Monitor, Keyboard, Mouse, and Power Cord, all of which play a very important roles. However, Laptop Computers may not necessarily have all these parts separately because they are built in. For instance, while Desktop Computer has mouse that lets you point to objects on the screen, Laptop uses Touchpad which is touch sensitive pad that lets you control the pointer by making drawing motion with your finger.

When one looks inside the computer case, some of the things you find include Motherboard, Central Processing Unit CPU(Processor), Random Access Memory RAM, Hard Drive as well as Power Supply Unit. However, most computes have expansion slots on the Motherboard that allow you to add various other types of expansion cards.

It should also be noted that the computer hardware and software job rely on Operating System OS, which makes different programs to run at the same time. There are three most commonly used Operating Systems which are **Microsoft Windows, Mac OS X** and **Linux.**

Computer uses applications for its operations, which are softwares that allow you to do some tasks. Example of computer apps that are popular include **Word Processors, Web Browsers, Media Players, Games** to mention but few. There are many other applications which can be installed on the computer, or uninstall if you don't want to use them anymore.

In the Full Course, you will learn everything you need to know about **Basic Computer Skills** with **Certification** to showcase knowledge/skill gained.

Basic Computer Skills Course Outline

Basic Computer Skills - What is a Computer
Basic Computer Skills - Hardware Basics
Basic Computer Skills - Basic Parts of a Computer
Basic Computer Skills - Buttons and Ports on a Computer
Basic Computer Skills - Inside a Computer
Basic Computer Skills - Laptop Computers
Basic Computer Skills - Mobile Devices

Basic Computer Skills - Software Basics
Basic Computer Skills - Understanding Operating Systems
Basic Computer Skills - Understanding Applications
Basic Computer Skills - Using a Computer
Basic Computer Skills - Setting Up a Computer print
Basic Computer Skills - Getting Started with Your First Computer
Basic Computer Skills - Getting to Know the OS
Basic Computer Skills - Using the Internet
Basic Computer Skills - Connecting to the Internet
Basic Computer Skills - Getting Started with the Internet
Basic Computer Skills - Understanding the Cloud
Basic Computer Skills - Safety and Maintenance
Basic Computer Skills - Keeping Your Computer Clean
Basic Computer Skills - Protecting Your Computer
Basic Computer Skills - Creating a Safe Workspace
Basic Computer Skills - Basic Troubleshooting Techniques
Basic Computer Skills - How to Use Your Computer's Built-in Help
Basic Computer Skills - Learning a New Program
Basic Computer Skills - Bringing Your Files with You
Basic Computer Skills - Using Accessibility Features
Basic Computer Skills - Exams and Certification

BISMARCK

TECHNOLOGY & LEARNING INSTITUTION LIMITED

Every Life. Every Moment. Every Day. A New Discovery...

WEB DESIGN COURSE AND CERTIFICATION

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Web Design?

Web Design is the process involved in creation of standard websites. A standard website has two major sides, namely: **Front-End** and **Back-End.**

In 1989, Tim Berners-Lee at CERN – The European Organization for Nuclear Research proposed to develop a project called: a global hypertext project, then it later became what we now know as: the **World Wide Web – WWW.**

The web browsers at that time could read Text-only pages, one of them is called: **Simple Line-mode Browser.** Later In 1993 Marc Andreessen and Eric Bina, created the **Mosaic Browser** which was a more advanced web browser at the time.

Advantages of Studying Web Design

1. It helps students to gain both Web Mark-up Skills and Programming Languages skills.

2. It helps students to be able to create responsive websites.

3. It helps to gain necessary skills for building user-interaction interfaces for websites.

4. Web design is a useful skillset for individuals, professionals, businesses and entrepreneurs.

5. Studying web design helps students gain other design skills such as graphic design.

6. Web Design creates job opportunities and serves as source of self-employment for web entrepreneurs and freelancers.

Features and Benefits of Web Design

1. Web Design helps to beautify web pages on the internet.

2. Web Design is easy to maintain and co-ordinate.

3. Web Design helps to put our brands and businesses on the internet.

4. It improves user interactions using mobile responsive technology, because users can now browse web pages conveniently with their mobile phones.

5. Web Design plays a big role in boosting business visibility on search engines.

Web Design Components

Web Design focuses more on the Front-end side which encompasses several aspects including:

1. Webpage Layout,
2. Content Production,
3. Element Placements and
4. Web Graphics.

The Back-End encompasses of:

1. Server-side Queries and
2. Database Management.

The Front-End part of Websites are created using Web Graphics, a Markup Language called HTML - Hypertext Markup Language and XHTML - eXtensible Hypertext Markup Language. The elements within a webpage are typically defined using CSS - Cascading Style Sheet. The website behaviour and interactivity are defined by JS - Javascript.

In other words, Web Graphics is for Images such as logo, banners, buttons etc, HTML is for content and layout, CSS is for element and layout styling and then JS is for defining page behaviours and user interactions.

There are two major ways websites can be designed or created: It can be created:

1. Statically - Static Website
2. Dynamically - Dynamic Website

A Static website contains static HTML and CSS pages including images that are locally stored and presented by the browser each time they are requested by users. Static pages are created only once by the designer and are presented locally when requested by the user via the browser. The benefits of a static website is that they were simpler to host, and the servers hosting them only need to serve the static content once and not need to execute server-side scripts each time requested. This can help save load time and reduces server overloads.

A Dynamic website is generated on the go or on the fly and fully uses server-side technology to generate and display the webpages. They basically extract their content from back-end databases, this is because dynamic pages or content are first stored in database tables and are presented by the browser when requested by users. Dynamic websites generally requires more server capacity, because each request by the user or browser requires a database connection but with the introduction of Web Caches and CDN - Content Delivery Network. Dynamic websites are sure to load even faster than you can imagine.

Web Design Study

Some of the things you will learn in this course include:

Dreamweaver, which is a web design/development editor by Macromedia Inc. It offers a more user friendly interface for web designers and developers. It presents interface for HTML, CSS and JS Coding in an easy to understand format and also makes it possible for web designers and developers to preview the results of their work in real time.

Adobe Fireworks, which is a Bitmap and Vector Graphics editor, used to enhance the graphics work of a website. This module will expose you to the world of graphic design especially relating to website graphics.

The HTML (Hypertext Markup Language) course module will help you understand HTML Coding, Syntax, Keywords and their functions and how to make use of them in various forms and dimensions. You will learn how to insert headers, adjust header sizes, insert links, images, tables, title pages, home page, linking one web page to another pages within the same website and also linking to another website.

The CSS (Cascading Style Sheets) course module helps you to understand styling of web pages and how to integrate CSS function into HTML. The CSS helps the website to be adaptable and flexible for viewing on any device ranging from desktop computers to laptops, mobile phones, iPads etc. You will also learn how CSS works independently.

The JS (Javascript) course module which gives you basic understanding of building web page behaviours and modifications.

The Web Hosting, includes how to make choices like hosting service and servers to use, hosting plans to pick and how to upload and launch your website on the internet. Others include: Domain names, subdomain, types of domain such as generic domain, country code domain etc.

In the Full course, you will learn everything you need to know about Web Design, you will be a competent **Web Designer** with **Diploma Certificate** to showcase your knowledge and competence.

Duration: Study At Your Own Pace

Format: Web and Video Lectures

Certificate: Tech Diploma

Web Design Course Outline

INTRODUCTION
Web Design - Introduction & Practice
Web Design - Wordpress
CODING & GRAPHICS
Web Design - Dreamweaver
Web Design - Adobe Fireworks
Web Design - HTML
Web Design - CSS
Web Design - JS
HOSTING
Web Design - Web Hosting
Web Design - Video Lectures
EXAMS & CERTIFICATION
Web Design - Exams and Certification

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

FOOD TECHNOLOGY COURSE AND CERTIFICATION

DURATION: 6 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Food Technology?

Food Technology is the science that deals with the various techniques and principles involved in the processing and preservation of food substances. Food Technology is a branch of food science that is involved with the various production processes to develop edible products.

The Application of Food Science and Technology helps in producing more safer, nutritious and wholesome food products. The study of food technology is used to develop new systems and methods for keeping food products safe and immune from natural harms such as micro-organisms and bacterias. Food processing also helps in preservation and enhancement of food flavors and helps to reduce toxins in food products which produces a better nutritious and safer food products ready for marketing, distribution and public consumption.

The Modern Food Processing Techniques are key to the ever-flourishing supermarkets that we have today. For example, Extra nutrients and preservations can be added to food while processing to avoid spoilage. Some of the techniques that are used in preservation are spray drying, freeze-drying juice concentrates, and the introduction of artificial sweeteners, preservatives and colorants. Of recent, many products such as dried instant soups, reconstituted fruits and juices (sometimes blended fruits) and self-cooking meals were developed to benefit working people.

Process of Food Technology

Various food processing industries are involved in the process of food technology such as:

1. Primary and Secondary processing,
2. Quality Management,
3. Preservation,
4. Packaging, and
5. Labelling of a mixture of products such as dairy products, fruit & vegetable products, fish products, confectionery products, meat & poultry products and food grains.

Features of Food Technology

There are many features of Food technology and some of them are:

1. Food processing is the processing of food substances by modifying and improving their properties to preserve it, enhance and improve its quality or make it functional and more useful.

2. Food processors take raw vegetables, raw animals, raw food substances, marine materials and convert them into edible products with the use of the application of labor, energy, machinery and scientific knowledge.

3. Various biological, chemical and mechanical processes are used to convert perishable, bulky, and typically food materials that are inedible materials into more convenient, shelf-stable, and palatable foods and beverages.

4. Food technology includes all the aspects of food science, which include food production, food processing, and the distribution of food products. Several Professionals work to improve manufacturing methods through preservation, storage and new product development. They also work with food scientists to improve the nutritional value of food products.

5. The fields of study that are related to food technology include analytical chemistry, engineering, quality control, biotechnology, nutrition, and food safety management.

Benefits of Food Technology

There are many benefits, some of which are:

1. Food processing is made easier with application of science and technology,

2. Food processing and packaging is safer with application of technology,

3. Food processing is nutritious and modern with application of science and technology.

4. The Food processing industry is the largest manufacturing industry in the whole world. Employing over billions of people, so when you study food technology, you have a vast amount of job openings and the opportunities to start your own is never-ending for as long as humans and animals eat.

Role Of A Food Technologist

Food Technologists are individuals who take up Food Science and Technology as a career. They do pretty much everything from working with the pure science behind what the food is made up of, to planning the efficient manufacture of food products.

Their activities include:

1. Identify ways to keep food fresh, safe and looking good
2. Research on a cheaper and faster way of producing food
3. Test the quality and safety of food
4. Invent new 'recipes' for foods using new ingredients
5. Make changes to foods, like creating sugar-free products
6. Design processes and machines that make the products on a large scale.

Why Study Food Technology?

1. Benefit From Job Security: The food industry is one of the largest on the planet, and people will always have to eat. This means if you are working anywhere along the food supply chain, you will always have a job.

2. Access To A Diverse Environment: There is something for everyone, whether it be in quality, R&D, sales, marketing, manufacturing, teaching or in government.

3. Increase Your Earning Potential: Studying food technology offers many opportunities to earn a higher income.

4. The Food: If you love food you will definitely enjoy working in the food industry. Whether you are creating exciting new products, testing products for quality, or doing research, you will be exposed to a plethora of amazing food. You will discover dishes and flavor combinations you never knew existed.

5. Travel Opportunities: The food industry is a global one, and many large companies around the globe also conduct business in several other countries. Depending on your position, it's likely you will get to travel, often paid for by your company or agency.

6. Self-Employment Opportunity And Consultancy: Studying food technology provides one with entrepreneurial opportunities, you can start your own food company and even offer consultancy services.

7. This Course on Food Technology is well equipped with tools and references to allow our students to develop skills in new and already existing technologies.

8. Students who takes this course are able to sharpen their key employability skills from managing workloads, working to a fixed deadline, working together as a team and for commercial awareness in the food and dairy industry.

9. The Food processing industry is the largest manufacturing industry in the whole world. Employing over billions of people, so when you study food technology, you have a vast amount of job openings and the opportunities to start your own is never-ending for as long as humans and animals eat.

Food Technology Course Outline

Food Technology - Introduction
Food Technology - Physical properties of food materials
Food Technology - Fluid flow
Food Technology - Heat and mass transfer, basic principles
Food Technology - Reaction kinetics
Food Technology - Elements of process control
Food Technology - Size reduction
Food Technology - Mixing
Food Technology - Filtration
Food Technology - Centrifugation
Food Technology - Membrane processes
Food Technology - Extraction
Food Technology - Adsorption and ion exchange
Food Technology - Distillation
Food Technology - Crystallization and dissolution
Food Technology - Extrusion
Food Technology - Video Lectures
Food Technology - Exams And Certification

יהוה
I AM THAT I AM

BISMARCK

TECHNOLOGY & LEARNING INSTITUTION LIMITED

Every Life, Every Moment, Every Day. A New Discovery…

E-AGRICULTURE COURSE AND CERTIFICATION

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is E-Agriculture?

E-Agriculture is an emerging field that is focused on the improvement of both Agricultural and Rural Development, through improved and advanced information and communication technology processes.

E-Agriculture is basically about the design, development and application of creative and innovative information and communication technologies in the rural sector with its primary focus on Agriculture.

Agriculture is defined as the science or practice of farming which includes cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products.

E-Agriculture is sometimes referred to as ICT in Agriculture. Both are more recent terms in the field of Agriculture and Rural Development practices.

ICT in Agriculture or E-Agriculture Solutions have been created and tested all over the world to help farmers and agriculturists improve their livelihood through increase in agricultural productivity and income by reducing the risks in farming.

E-Agriculture now moves beyond technology. It further increase the implementation of technology with multimedia, internet, knowledge and culture, with the singular goal of improving communication and the learning process across various sectors of agriculture, both locally, regionally and globally. Including facilitation, support of standard and norms, technical support, capacity building, education and extension are all the fundamental concepts of E-Agriculture.

Features and Characteristics of E-Agriculture

Some of the Features of E-Agriculture includes:

1. ICT-Based Solutions: Applications of E-Agriculture in extensive agricultural systems in developed countries are moved towards using sophisticated information technologies to improve the quality and quantity of agricultural products, in other to maximize profits. This is the same with precision agriculture in which farmers are making use of computers and technologies to cut costs, improve yields and protect the environment, information gathering, marketing and sale of agricultural products conducted over electronic networks such as the internet and extranets. On the other hand, many developing farmers' knowledge is improved and updated through grass root level initiatives of using ICTs, e-learning as well as distance education modalities to enhance the knowledge and capacity.

2. Precision Agriculture: In precision agriculture or site-specific farming, farmers use ICT tools and other technologies to obtain more precise information about agricultural resources which allows them to identify, analyze and to manage the spatial and temporal variability of soil and plants for optimum profitability, sustainability, and protection of the environment.

3. E-Commerce in Agriculture: Improved production and high yields due to the involvement of technology in agriculture brings about the need for farmers to look for profitable markets beyond what local communities offer. Electronic Commerce has helped greatly in this area. E-Commerce which is the general exchange of goods and services with the aid of the internet, is having a significant impact on agriculture because, it allows farmers to market and sell their products to anyone in any place with ease. With E-Commerce in agriculture, farmers can now easily meet their customers with little or no cost.

4. Exchange of Information: E-Agriculture offers an improved and efficient medium of information exchange and communication for the benefits of rural communities farm households and the rural service providers that are involved in the provision of agricultural, financial and communication services.

Benefits of E-Agriculture

There are Many Advantages of I.C.T In Agriculture or E-Agriculture, some of them are:

1. E-Agriculture reduce the cost and time spent by the farmers in general.
2. Modern machines and computer devices can automate the efforts of the farmers.
3. E-Agriculture aids in facilitating easy transportation of farm goods.
4. It brings about the application of synthetic fertilizers.
5. It promotes better marketing and exposure of the product.
6. It facilitates online trading and eCommerce.
7. It reduces the impact on the ecosystem.
8. It offers improved way of communicating between farmers and expert.
9. It offers a way of providing and sharing technical advice to farmers with communication tools such as internet.
10. It saves cost, time and energy.

In the Full Course, you will learn everything you need to know about **E-Agriculture** with **Diploma Certificate** to showcase your knowledge and competence.

E-Agriculture Course Outline

1. **Introduction**
    - E-Agriculture - Agriculture and information and communication technology ICT)
    - E-Agriculture - What is E-Agriculture?
    - E-Agriculture - The Case for E-Agriculture
    - E-Agriculture - Potential benefits of E-Agriculture across value chains
    - E-Agriculture - The Need for a National E-agriculture Strategy
    - E-Agriculture - The Need for a National approach
    - E-Agriculture - Determining the appropriate E-agriculture Approach
2. **Establishing a National E-Agriculture Vision**
    - E-Agriculture - Framework for a National E-Agriculture vision
    - E-Agriculture - Managing the vision development process
    - E-Agriculture - Stakeholder Engagement Approach
    - E-Agriculture - Strategic context for E-Agriculture
    - E-Agriculture - Learning from E-Agriculture trends and practices
    - E-Agriculture - Drafting an initial vision
    - E-Agriculture - Identifying the required E-Agriculture components
    - E-Agriculture - Gathering information on the current E-Agriculture environment
    - E-Agriculture - Assessing opportunities, gaps, risks and barriers
    - E-Agriculture - Refining the vision and develop strategic recommendations.
3. **Developing a National E-Agriculture Action Plan**
    - E-Agriculture - Need for developing a National E-agriculture action plan
    - E-Agriculture - Developing e-agriculture outputs and activities
    - E-Agriculture - Developing an integrated action plan
    - E-Agriculture - Defining implementation phases
4. **Monitoring and Evaluation**
    - E-Agriculture - Developing an E-agriculture monitoring and evaluation framework
    - E-Agriculture - Defining indicators for E-agriculture
    - E-Agriculture - Defining baseline and target measures for indicators
    - E-Agriculture - Defining supporting governance and processes
5. **Video Lectures**
6. **Exams and Certification**

BISMARCK
TECHNOLOGY & LEARNING INSTITUTION LIMITED
Every Life, Every Moment, Every Day. A New Discovery...

SOLAR ENERGY SYSTEMS COURSE AND CERTIFICATION

DURATION: 2 WEEKS
FORMAT: WEB/PDF PLUS VIDEO LECTURERS

CERTIFICATE OF COMPLETION

What is Solar Energy Systems?

Solar Energy Systems also referred to as Alternative Energy Systems are the basic components and mechanisms required to produce electricity directly from the sun.

Solar Energy is the most abundant source of energy that is available here on Earth. It can be captured and used in different ways, and as a renewable source of energy. It's an important part of our clean energy future. The sun does more functions for our planet than just being a light source during the daytime, each particle of sunlight known as a Photon that reaches Earth contains energy that fuels our planet.

Solar Energy is the ultimate source responsible for all of our weather system changes and the energy sources on Earth, and enough solar radiation hits the surface of the planet every hour to theoretically fill our global energy needs year in, year out.

Where does all of this energy come from? Our sun, just like any star in the galaxy, is like a massive nuclear reactor. Deep down in the Sun's core, nuclear fusion reactions happen to generate massive amounts of energy that radiates outward from the Sun's surface and into the space in the form of heat and light.

Solar Power can be harnessed and converted to usable energy by using photovoltaics or solar thermal collectors. Although solar energy only accounts for just a small amount of overall global energy use, the dwindling cost of installing solar panels means that more and more people in several places can take advantage of solar energy.

Features of Solar Energy Systems

There are many features of Solar Energy, some of them are:

1. Low Maintenance: Solar energy panels and devices comes with low cost maintenance.

2. Energy Security: It serves as alternative source of power, ensuring energy security.

3. Off the Grid Power Supply: Reduces the loads off grid systems.

4. Durability: Has a lasting life-span.

Benefits of Solar Energy Systems

1. Renewable Energy Source: Of all the benefits of solar panels, the most important thing about it is that solar energy is a truly a renewable energy source. It can be harnessed in all the areas of the world and it is available every day.

2. Reduces Electricity Bills: Since you would be attaining some of your energy needs with the electricity your solar system has generated, your energy bills would drop. How much you'll save on your electricity bills would be dependent on the size of your solar system system.

3. Diverse Applications: Solar energy can be used for different purposes. You can generate electricity (photovoltaics) or heat (solar thermal). Solar energy can be used to produce electricity in the areas that are without access to the energy grid, to distil water in regions that have limited clean water supplies and to power satellites that are in space.

4. Low Maintenance Costs: Solar energy systems generally do not require a lot of maintenance. You would only need to keep them relatively clean, so cleaning them a couple of times per year would do the job.

Why Study Solar Energy Systems?

1. Gain knowledge and skills in solar energy systems.
2. Job opportunities and career advancement in renewable energy industry.
3. Enrich your CV and increase your earning potential.
4. Self employment opportunity.

Solar Energy Systems Course Outline

Solar Energy Systems - Introduction
Solar Energy Systems - Status and prospects of PV technology
Solar Energy Systems - The working principle of a solar cell
Solar Energy Systems - Electrodynamic basics
Solar Energy Systems - Solar radiation
Solar Energy Systems - Basic semiconductor physics
Solar Energy Systems - Generation and recombination of electron-hole pairs
Solar Energy Systems - Semiconductor junctions
Solar Energy Systems - Solar cell parameters and equivalent circuit
Solar Energy Systems - Losses and efficiency limits
Solar Energy Systems - A short history of solar cells
Solar Energy Systems - Crystalline silicon solar cells
Solar Energy Systems - Thin-film solar cells
Solar Energy Systems - A closer look to some processes
Solar Energy Systems - PV modules
Solar Energy Systems - Third generation concepts
Solar Energy Systems - Introduction to PV systems
Solar Energy Systems - Location issues
Solar Energy Systems - Components of a PV system
Solar Energy Systems - PV system design
Solar Energy Systems - PV system economics and ecology
Solar Energy Systems - Solar thermal energy
Solar Energy Systems - Solar fuels
Solar Energy Systems - Solar panel installation
Solar Energy Systems - Video Lectures
Solar Energy Systems - Exams and Certification

יהוה
I AM THAT I AM

Madras Road, St. Helena Village, Piarco, Trinidad W.I.
Tel: 1 (868) 745-7409
www.bismarcktechnology.com
Email: contact@bismarcktechnology.com