

ENGINEERING SOFTSKILLS TRAINING

PRESENTED BY:

Dpros Global Resources Ltd. RC:1076266

ENGINEERING CONSULTANTS, TRAINING FACILITATORS & TECHNICAL SUPPORT SERVICES

Suite B6B, 24 Road Plaza, 24 Road, Festac town, Lagos.

Tel: +234-80-37916993, +234-70-52856858

Email: info@dgr.com.ng, Website: www.dgr.com.ng

Contact Person

CLINTON MBACHU

Training Coordinator

08037916993, 07052856858

DPROS GLOBAL RESOURCES LTD.

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E-Mail: info@dgr.com.ng Website: www.dgr.com.ng

Dear Esteemed Colleague,

Thank you for your interest in our Engineering Softskills training programs. **DGR Consult** is the subsidiary of **Dpros Global Resources Ltd** (DGR), delivering capacity building and skills development programs & courses for the Engineering firms and oil & gas industry. We also offer training to institutes, Engineers, project managers, as well as graduates & undergraduates with focus in helping you develop competence and confidence in your career.

The software trainings we offer are used mostly by SHELL, MOBIL, SCHLUMBERGER, TOTAL, AGIP, CHEVRON, DELTAFRIK, NETCO, NNPC, NIGERDOCK and other Multinational Oil & Gas companies as well as Engineering Design firms too numerous to mention.



DGR Training Validates Your Expertise

In today's competitive marketplace, exclusive skills and profound knowledge is very vital in building a successful career path. That's why DGR provides you with certified training programs on different software suites and packages to help you reach the peak of your career. Whether you are already a professional in your field or just starting out in your career, we help you unveil your full potentials.

Joining any of our programs demonstrates your dedication to your career and your willingness to be proficient at what you do. It shows your eagerness to go that extra mile for an exciting career. And there's more.

We take pride in contributing to your career building process and we promise to offer you the best.

Who Can Participate?

- Petroleum Engineers
- Chemical Engineers
- Civil & Structural Engineers
- Mechanical Engineers
- Project Managers & Planners
- Graduates and Undergraduates
- Senior or Junior Staffs

What's In It For You?

- Develop new skills
- Keep your skills competitive
- Boost your career opportunities
- Gain a competitive advantage
- Gain a thorough understanding of Oil & Gas Projects
- Be recognized for your expertise & proficiency

We have A Variety Of Training Formats & Timetable

DGR training methods are designed to meet your budget and preferred learning Style. We offer **One on One Flexible Training** option which you can easily synchronize with your busy schedules, this includes **online training** courses, live virtual classes and hands-on training in our facilities or yours. **Our In-House Training** session and **Hands-On approach** in our facility can also be customized and fast tracked on request. All training programs are brought to you by expert instructors with extensive experience in the field, combined with very comprehensive training materials which serve as a handy reference even after your training.



DGR training presents to the trainee challenges & real-world scenarios matching day-to-day activities of various Oil and Gas projects. Our Hands-on training and vigorous testing method ensures that you get the very best, with every step fully explained and every technique comprehensively covered. At the end of the course, you are tested on your theoretical knowledge and practical skills with a project that is applicable to the chosen package.



DGR TRAINING PACKAGES & FEES

Kindly go through the list below and let us know which packages that best suit your career needs.

| S/N | PROGRAM NAME | DURATION | GROUP of 4 Per class | Executive/ 1 ON 1 class |
|-----|---|----------|-------------------------|----------------------------|
| 1 | PDMS 12.0 (Plant design Mngmnt system) | 8 Days | ₦ 55,000 | ₦ 65,000 |
| 2 | CAESAR II (Pipe Stress Analysis) | 8 Days | ₦ 55,000 | ₦ 65,000 |
| 3 | ASPEN HYSYS (Process Design/simulation) | 8 Days | ₦ 55,000 | ₦ 65,000 |
| 4 | PRIMAVERA P6 R8.2 (Project Management/Planning) | 4 Days | ₦ 55,000 | ₦ 65,000 |
| 5 | AUTO CAD 2D | 5 days | ₦ 20,000 | ₦ 30,000 |
| 6 | AUTO CAD 3D | 3 Days | ₦ 20,000 | ₦ 30,000 |
| 7 | PMP PREP Class | 5 Days | ₦ 35,000 | ₦ 45,000 |
| 8 | MS Project | 3 Days | ₦ 35,000 | ₦ 45,000 |
| 9 | STAAD PRO (Structural Analysis & Design) | 5 Days | ₦ 65,000 | ₦ 75,000 |
| 10 | ORION (R.C Design & Analysis) | 4 Days | ₦ 45,000 | ₦ 60,000 |

All Payments for the Training can be made at our Festac Office or via the bank details below

BANK : Stanbic IBTC Bank Plc
ACCT Name : Dpros Global Resources Ltd
Acct No : 0010449416

We value the opportunity to contribute to your career development process with cutting-edge skills and engineering knowledge that will help you reach and enhance the full potentials of your career. It is our pleasure to help you expand your knowledge in your area of expertise and to validate your proficiency.



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AVEVA PDMS

(Plant Design Management System)

Duration : 8 Days (5 hrs daily)
Software used : PDMS 12.0

Objectives:

The course objective is to train the students in Plant Design which includes Equipment Design, Routing (Piping), Structures & Drafting. The student will learn about above mentioned modules.

About the software:

AVEVA PDMS 3D design software delivers maximum productivity and capability on all types of plant project, from the smallest upgrade to new build projects of unlimited size and complexity. PDMS users range from small engineering contractors to many of the largest multinational process and power companies.

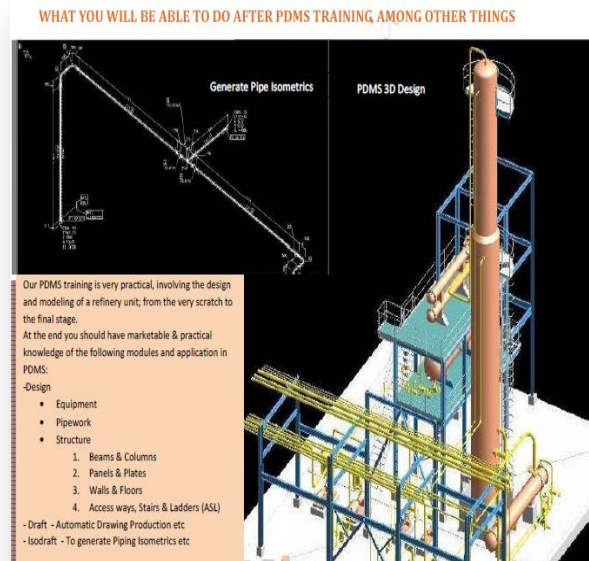
Expected Learning Outcome

EQUIPMENT & PIPING MODULE:

- Introduction to the Design module
- Controlling the display
- The Equipment application
- Hierarchy and naming conventions
- Creating and editing equipment and primitives
- The Piping application
- Creating and editing piping systems and components

STRUCTURAL MODULE:

- Introduction to the Design module
- Controlling the display
- The Structural Beams & Columns application
- The Panels and Plates application
- Hierarchy and naming conventions
- Creating and editing structural elements
- Curved Steel
- Clash Detection



- Data consistency checking
- Clash detection
- Isometric generation

DRAFTING MODULE:

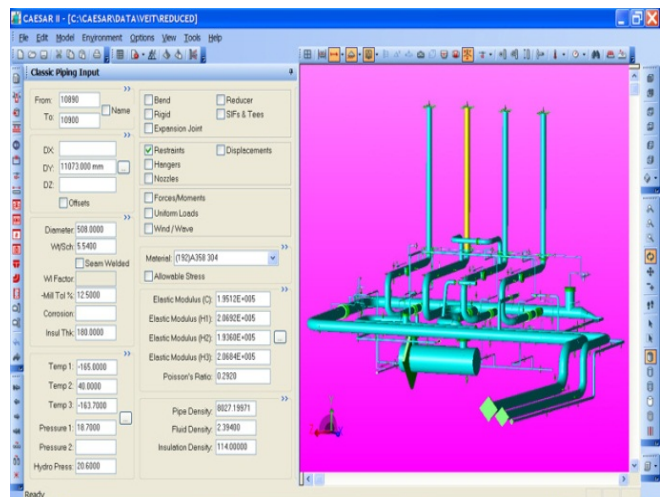
- Introduction to the Draft module
- Hierarchy and naming conventions
- Creating Drawings, Sheets and Views
- Dimensioning Application - annotation
- Labeling Application
- Section Planes
- 2D Drafting
- Automatic Drawing Production

CAESAR II

(Pipe Stress Analysis & Design)

Duration : 8 Days (5 hrs daily)
Software used : InterGraph CAESAR II

Training Scope : This Training covers proper piping system modeling guidelines, methods of static and dynamic analysis of piping systems, evaluation of system designs, and effective approaches to system redesign in compliance with standard piping codes. The presentation is based on hands-on solution of example problems in order to illustrate the use of CAESAR. No previous experience in the use of CAESAR is required, but some background in pipe stress analysis is desirable. A discussion/question/answer format is also employed in order to maximize retention of course material and theoretical concepts. Persons attending the training should expect to leave the course with a working knowledge of CAESAR II, and pipe flexibility.



Topics Covered in Caesar II Includes

- * Basic piping components and assumptions; element assembly
- * Code compliance requirements
- * Spring Hanger design
- * Pipe supports (linear vs. non-linear)
- * Stress Intensification Factors
- * Introduction to expansion joints
- * Cold Spring effects
- * Basic dynamics theory
- * Harmonic analysis
- * Eigen solutions
- * Seismic analysis

Who Can Participate in Caesar II Training?

- > Engineers in the piping design and analysis field;
- > Practicing piping engineers requiring background on Code compliance and trends in piping design, analysis and fabrication
- > Existing and prospective CAESAR users

What's In It For You?

- ✓ Delegates will learn to analyze problems that, until now, had to be set outside the company to "specialists".
- ✓ Save time by learning to solve potential pipe stress problems more accurately and more quickly.
- ✓ Save company money by helping keep more jobs in-house, provide more accurate cost estimates, and save future re-designs by having a better system from inception.
- ✓ Your company will gain that competitive edge it needs in today's marketplace.

ASPEN Hysys

(Process Design & Simulation)

Duration : 8 Days (5 hrs daily)

Software used : Aspen Hysys



This Training will teach you how to use Aspen HYSYS in developing and analyzing the maximum effectiveness of a process flow system. We will equip you with the necessary skills, insights and knowledge in steady-state & dynamic modeling with hysys .

The training will also cover practical hands-on approach in Steady state process simulation and design, which ensures that optimal designs are identified, that equipment is performing as-per specification and to evaluate retrofits and improve a process.

HYSYS TRAINING OUTLINE

Aspen HYSYS Steady State Modeling Course Overview

Module 1 - Aspen Hysys Basics

- Enter components, define a fluid package and add streams
- Execute flash calculations
- Attach stream utilities

- Understand color schemes employed

Module 2 - Propane Refrigeration Loop

- Add and connect unit to build a flowsheet
- Understand forward-backward information propagation in
- Convert a case to a template

Module 3 - Refrigerated Gas Plant

- Install and converge heat exchangers
- Implement logical operations: Balance and Adjust
- Adding template to the main flowsheet
- Perform case studies on your simulation

4 - NGL Fractionation Train

- Install and converge columns
- Adding extra specifications to columns

Module 5 - Oil Characterization

- Understand the steps required for oil characterization
- Characterize an oil using chromatographic data

Module 6 - Gas Gathering Operations

- Using Pipe Segment to model pipelines

Module 7 - Two Stage Compression

- Understand the use of Recycle operation in Aspen HYSYS
- Recognize suitable (tear) locations for Recycle operations

Module 8 - Acid Gas Sweetening

- Simulate Amine towers in
- Supply tray dimensions to calculate component efficiencies for Amine towers
- Understand the use of Set Operation
- Use of Spreadsheet to calculate maximum acid gas loadings

Module 9 - Natural Gas Dehydration

- Model a typical TEG dehydration unit
- Determine water dew point for a gas

Module 10 - Reporting & Simulation

- Customize reports in Report Manager
- Use XML to create a summary of input data from a case
- Install and run an Excel utility to view data from the workbook
- Creating Excel interface

Aspen HYSYS Dynamic State Modeling Course Overview

Module 1 - Basic Control Knowledge

- Learn the essence of process control
- Learn the basic control theory/strategy
- Learn the different types of Control actions and Applications

Module 2 - Steady state Modeling

- Define components & Fluid package
- Add streams and Operations
- Solve steady state material and energy balances

Module 3 - Pressure-Flow (PF) specification theory

- Learn the basics of pressure-flow specifications
- Learn the applications of Pressure-Flow specs on Unit operations

Module 4 - Dynamics Fundamentals 1 (column Design Dynamics)

- Distillation column configuration
- Column preparation for dynamics
- Set up control strategy
- Test the model using Automatic or manual tuning methods

Module 5 - Dynamics Fundamentals 2 (column rating Dynamics)

- Addition of unit operations and controllers in dynamic mode
- Substitution of the standard Aspen HYSYS condenser unit operation with a detailed overhead system
- Make necessary pressure-flow specifications for overhead system
- Appropriate control strategies implementation

Module 6 - Equipment Sizing

- Sizing of Pipeline

- Vessel Sizing using Excel
- Generation of Auto P& ID.

Training materials:

- Aspen Hysys Training manual
- Process Engineering videos
- Process Engineering E-books Corporate

AutoCAD 2D & 3D

Duration : 5 Days (5 hrs daily)
Software used : Autocad 2013 or 2014

Objective

Autocad 2D training course objective is prepare participants with in-depth skills to use 2D CAD drawing, design, and drafting using a 2D drafting tool in industries. Upon completion participants will be able to navigate the interface comfortably, using the features. Use the fundamentals features and precision drafting tools in AutoCAD to develop accurate technical drawings. Present drawings in a details and visually impressive manner.

Contents

- Introduction to AutoCAD 2D
- Drafting Settings
- 2D Drawing Commands
- Sketch Modify Commands, Modifying Object Properties
- Layer Management
- Detail Dimensioning of Entities.
- Productivity Tools in 2D Drafting

AutoCAD 3D

Objective

Autocad 3D training course objective is to teach the participants more advanced features; on the technique; on how to design and model products in 3D design software, encapsulating surfaces and solids in visualizing engineering designs.

Contents

- Learn 3D Modeling
- Viewpoint
- View ports
- UCS
- 3D Coordinate System
- UCS, Wire Frame
- Surface & Solid Modeling
- Using 3D Surface Primitive
- Shading the Model
- Slice/section
- Union/Subtract
- Interfer/intersect
- Solid Model Editing
- Advantage of Solid Modeling
- Using 3D Solid primitives
- Rendering Techniques
- About rendering engine
- Anti-Aliasing
- Rendering in View port
- Rendering to File



Take design further.

Speed up documentation, share designs accurately, and explore ideas more intuitively in 3D. AutoCAD® software provides the ultimate in power and flexibility, customizable for your specific needs.

"From start to finish, I depend on AutoCAD for design."
— Eddie Paul
Hollywood special effects

STAAD.Pro

Duration : 5 Days (5 hrs daily)
Software used : Staad- Pro V8i

Objective

STAAD.Pro Training course objective is to introduce the student to basic methods of Computer aided structural analysis and design of structural components. It will enable participants to analyze and design complex structures using the software tool -Staad.Pro and validate the design for safety in all aspects.

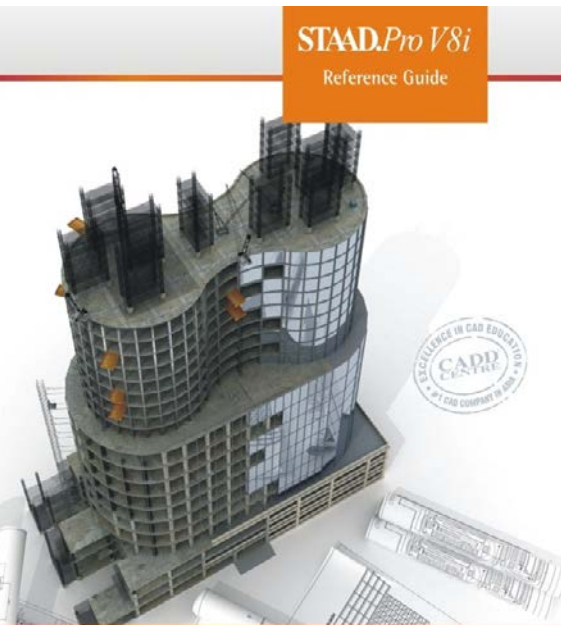
Skills Taught

- Modeling structure geometry
- Assigning properties to structural elements
- Generating Loads
- Analyzing the mode

Staad-Pro Training Content

Structural Engineering concepts

Classification of structures
Overview of structural analysis and design
About Staad.Pro interface
Unit Systems
Structure Geometry and Coordinate Systems
Generation of Joints and Members
Advanced modeling methods – Joints and members
Assigning material constants, member properties,
Defining loads to structural elements
Types of Analysis
Methods of Analysis
Performing analysis of structure
Generating preprocessor, post processor information
Generating statistical report
Introduction to Finite Elements in Engineering
Defining elements in structure



Assigning element properties
Element creation using Staad.Pro Editor
Defining loads for elements
Introduction to design principles in practice
Performing R.C. Design on structure
Design on Columns, beams and slabs
Performing steel design on structure
Steel optimization method in design
Performing component design for structures
Exporting and importing file to AutoCAD
Custom animation of structural geometry
Customizing and configuring Staad.Pro

In this course, you will generate model geometry, assign properties to structural elements, and perform an analysis. Live training courses are very interactive. Students will continually engage with the instructor to ensure a successful learning outcome that includes a course assessment.

CSCS Orion 16 & 18

(R.C Analysis & Design)

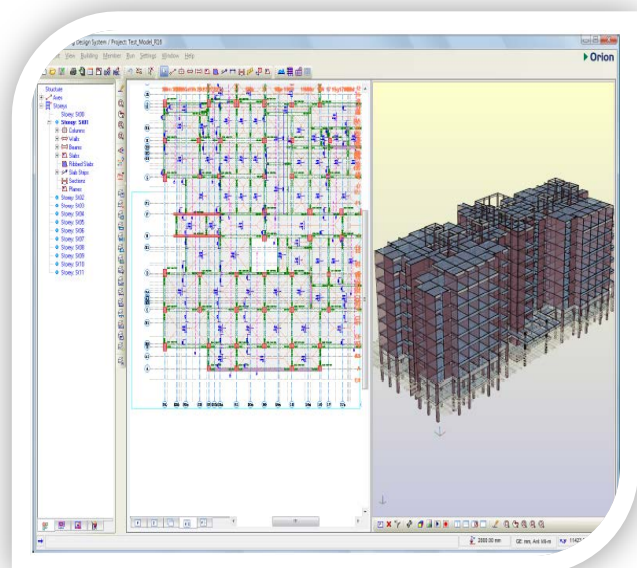
Duration : 4 Days (5 hrs daily)
Software used : CSC Orion 16 & 18

Orion CONCRETE Structural Software is ideal structural software for those involved extensively in the design of reinforced Concrete Building Structures. Imagine the speed of modeling, loadings, analysis and designs for such repetitive structures, and most importantly, for output of Drawings, Building Quantities and Costs.

. It has 2D/3D modelling environment from which automatic analysis, design and drafting is provided for the engineer.

DGR's Orion training covers these and much more

- **Model Generation** : You will learn to use interactive menu-driven model generation with simultaneous 3D display 2D & 3D graphic generation using the tools and utilities that enables you model and generate complex structural models
- **Model Verification** : You will learn 2D/3D verification of failed members of the structure like



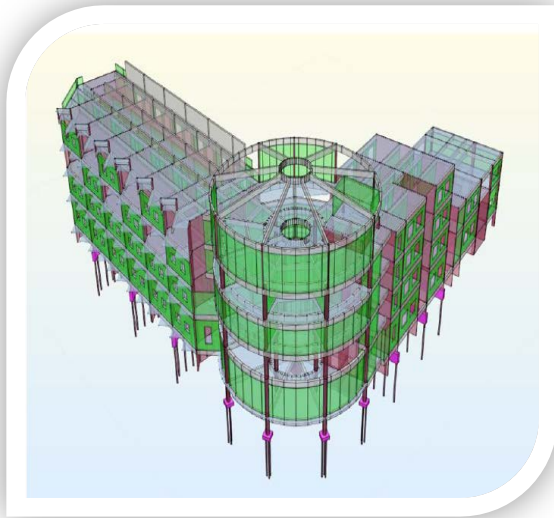
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Engineering Designs - Consultancy - Training & Project Management



beams, columns and floors on screen as well as on plotter/printer Full 3D shapes for frames, elements Isometric or any rotations for full 3D viewing

- **Import & Export** : You will learn to import your grids from architectural drawing sent to you in Autocad format and to also export your finished details to AutoCAD for more details and Plotting

Benefit of this Training

- ✓ Trainees will learn Hands-On concept of designing structural beams/columns/slabs/footings
- ✓ Trainees will gain practical knowledge of R.C design & analysis
- ✓ Trainees will also gain Knowledge of Engineering Design codes, Simulation and Modeling
- ✓ Prepares Trainees for the likely situations that will arise upon getting back to project
- ✓ Top quality training manuals excellent reference material for continued growth in use and practical application of these software tools at work.

ORACLE Primavera P6

(Project Management, Planning & Scheduling)

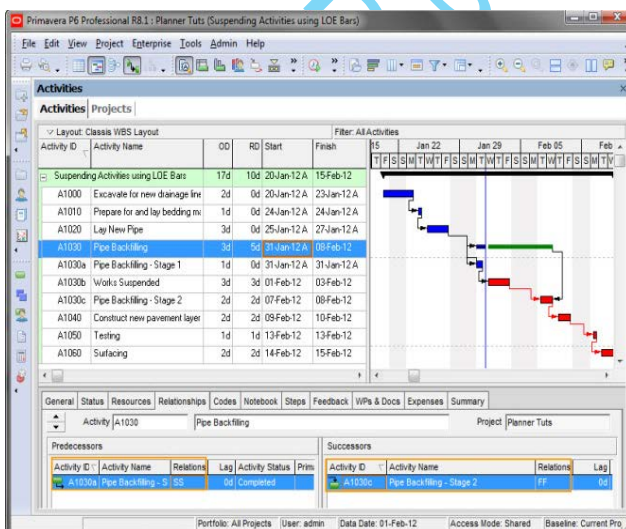
Duration : 4 Days (5 hrs daily)

Software used : Oracle Primavera P6 (PPM) R8.2

Objective

Primavera training course is designed to make the participants a Project Management Professional. Objective of this course is to build capability to manage large engineering projects over millions of activity to normal project among young and growing managers. Primavera helps the designers to save millions of dollars every day globally. A course on Primavera will add professional value to the individual.

Primavera Training Content



1. Introduction to Primavera
2. Navigating in the Project Management Module
3. Managing Multiple Projects
4. Creating a Project
5. Creating a Work Breakdown Structure (WBS)
6. Activity Coding
7. Adding Activities
8. Maintaining the Project Documents Library
9. Creating Relationships
10. Scheduling
11. Assigning Constraints
12. Formatting Schedule Data
13. Defining Resources
14. Assigning Resources and Cost
15. Analyzing Resources and Cost
16. Optimizing the Project Plan
17. Baselining the Project Plan
18. Executing the Project Plan
19. Analyzing the Updated Project
20. Reporting
21. Creating Output

MICROSOFT Project

Duration : 3 Days (5 hrs daily)
Software used : MS Project 2013

Objective

Microsoft Project course is designed to make many Project Managers computer ready! The course teaches the project management tools of Microsoft Office Project. Participants will learn how the MSP is applied and implemented in planning and managing small and medium size projects effectively to make more profits.

MS Project Training Content

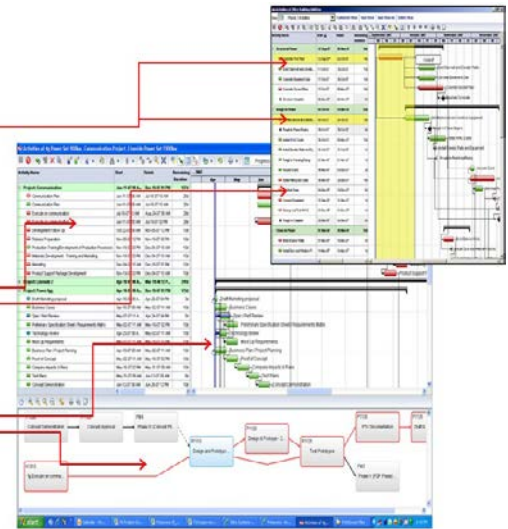
Introduction
Initiation
Planning
Execution
Controlling
Closure

Introduction to Microsoft Project
Starting new project file
Calendar definition
Task definition
Scheduling tasks
PERT Analysis
Work Breakdown Structure
Constraints
Defining Resource
Assigning Resources to tasks
Analyzing Resources Distribution
Resolving Over Allocation
Optimizing Project Plan
Tracking Progress
Performance Measurement
Multiple Projects
Printing Views and Reports
Customizing standard Reports
Importing and exporting data
Review & Test

Manage tasks & activities with direct and secure updates from the field

Quickly develop & communicate project plans

Collaboratively develop and explore what-if scenarios to respond to change



PMP PREP CLASS

PMI certification is the smartest way to build your project management career. Whether you are a fresher at the entry level or project management professional lookg forward to the next level we have a program for you.

What is PMI®?

PMI® is the leading global association in the project management industry. PMI® was founded in 1969 and sets the global standards in the project management and this is elaborated in "A Guide to Project Management Body of Knowledge (PMBOK®), 5th edition". This handbook provides guidelines, rules and characteristics to be followed in project management

Global Recognition for PMP

Acquiring PMI Certification will add value to you personal resume as this is globally accredited against International Standards Organisation (ISO) standards. Based on your level you can opt for PMI's credentials:

- Project Management Professional (PMP) or
- Certified Associate of Project Management (CAPM)

Project Management



Why Become Certified?

- Globally Recognised Certification
- Professional Achievement
- Increased your marketability
- Greater Career Growth
- Raises Customer Confidence

Course Content

- Project Management Framework
- Project Management Environment & Process
- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communication Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management
- PMI Professional Responsibilities
- Mock Tests and exercises after each module
- Road Map of PMP / CAPM Examination



All Payments & Training Registration can be made in our Festac office or via the Bank details Below.

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More Information?

For more information & registration for any of our programs, kindly reach out to us...

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Thank you for taking time to contact us and for giving us this opportunity to serve you!