



PROJACS ACADEMY  
by egis



# Advanced Techniques in Projects Supervision

التطورات العملية الحديثة في الإشراف الميداني على  
تنفيذ المشاريع

07 - 11 August 2023

Dubai / U.A.E.

## Introduction

This program is a designed training which takes five days to provide participants with the scientific background and a comprehensive process on contract management and supervision of the work of implementation of engineering projects. Design methodology has been training for this program through field visits to modern engineering projects.

Occupies the supervision of the implementation of the projects featured prominently in the management of engineering projects because of its active and important role in the success of the project. ensure implementation in accordance with the contract documents in line with the objectives of the project, as it is Sergeant translation process of the project specifications and drawings into reality imperceptible corresponded visible benefit from it, and thus achieve the purpose for which it was established for.

The absence of supervision or deficiencies in performance leading to the large number of judgments may be sometimes indifference leading to dire consequences ominous. Which requires the recognition of its importance to all those who support it and associated with him in the project. Nothing is more indicative of the fact that the engineering departments in the concerned authorities are almost devoid of public administration under the name of "overseeing the implementation / execution of projects."

## Objectives

This course is designed to introduce the basics of the profession of supervising the work of the implementation of projects for all involved in the construction sector, particularly for engineers working in government agencies supervising the implementation and office workers consulting and contracting companies private and public companies, production and marketing of building materials and systems of construction and equipment, as well as engineers who are interested and who wish to practice this profession. The course aims also to improve the profession of overseeing the implementation of the projects with the owner using modern methods in the management and follow-up, implementation and knowledge of the most important concepts of practical and scientific to oversee the implementation of projects, including that of the stages of the project life multi-group the following tasks:

- First Tasks: a general introduction to the reality of project supervision
- Second Tasks: contract management for projects and legal tasks
- Third Tasks: administrative tasks
- Fourth Tasks: financial tasks
- Fifth Tasks: engineering tasks

## Who Should Attend?

All engineers who are responsible for projects implementation.

## Course Outline

### Day One

- **Assess Work Methods, Resources and Systems to Meet Works Requirements**
  - Evaluate And Select Work Methods
  - Ensure That Work Activities and Resources Meet Project Work Requirements
  - Contribute To the Identification of a Work Team
  - Establish And Monitor Communication Systems and Organizational Procedures
  - Evaluate Feedback Information and Recommend Improvements
- **Supervise Materials, Plant and Equipment on Site**
  - Organize, Control and Monitor Supplies of Materials
  - Identify, Allocate and Plan the Deployment and Use of Plant, Equipment or Machinery
- **Implement Works, Safety and Environmental Systems to Meet Project Requirements**
  - Plan The Preparation of The Site for The Project
  - Monitor Project Activities
  - Establish, Implement and Maintain Systems for Managing Health, Safety and Welfare
  - Establish, Control and Monitor Environmental Factors and Sustainability

### Day Two

- **Contribute To Control Work Quality, Progress and Cost**
  - Control Project Progress Against Agreed Quality Standards
  - Establish Dimensional Control Criteria
  - Control Project Progress Against Agreed Programs
  - Control Project Quantities and Costs
- **Contribute To Performance of Teams, Individuals and Self**
  - Allocate Work and Check People's Performance
  - Enable Learning Opportunities
  - Manage Your Personal Development



- **Contribute To Productive Working Relationships**
  - Develop And Maintain Good Working Relationship

### **Day Three**

- **Plan And Implement Highways Maintenance Activities**
  - Plan Highways Maintenance or Repair Activities
- **Satisfy Customers' Requirements**
  - Provide Customer Service in Construction
- **Plan And Implement Maintenance, Repair and Demolition Works**
  - Plan Historical Conservation/Restoration Activities
  - Plan Demolition Activities
  - Plan And Schedule the Maintenance or Remedial Activities Of Property, Systems or Services
- **Hand-Over Properties to Customers**
  - Manage Project Hand-Over

### **Day Four**

- **Contract Fundamentals**
  - The Elements of a Contract
  - Types Of Contracts and Their Advantages and Disadvantages
    - Lump Sum Contracts
    - Unit Price Contracts
    - Cost Plus Contracts
  - Forms Of Contract
  - Identification Of Contract Terms
    - Design -Then -Build
    - Fast Tracking
    - Design And Build
    - Construction Management
    - B.O.T.
  - Terms And Conditions of Contract
    - Open Tendering Contracting
    - Closed Tendering Contracting
    - Serial Tendering Contracting
    - Negotiated Tendering Contracting
    - Direct Order Contracting
    - Delegation Contracting

## **Day Five**

- **Cost Estimation:**
  - Conference Method
  - Financial Method
  - Function Method
  - Cost-Index Method
  - Comparison Method
  - Approximate Quantities Method
  - Expert System Method
  - Expected Value Method
  - Cost-Capacity Curves Method
  - Global Method
  - Factor Method
  - Parametric Estimating Method
  - Elemental Estimating Method
  - Resource Analysis Method
  - Panel Unit-Cost Method
  - Cost Models Method
  - Range Method
  - Unit Rates Method
  - Detailed Estimating Method

### Training Method

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a 7" Tablet containing a copy of the presentation, slides and handouts
- Post-assessment

### Program Support

This program is supported by interactive discussions, role-play, case studies and highlight the techniques available to the participants.

### Schedule

The course agenda will be as follows:

- |                     |                  |
|---------------------|------------------|
| • Technical Session | 08.30-10.00 am   |
| • Coffee Break      | 10.00-10.15 am   |
| • Technical Session | 10.15-12.15 noon |
| • Coffee Break      | 12.15-12.45 pm   |
| • Technical Session | 12.45-02.30 pm   |
| • Course Ends       | 02.30 pm         |

### Course Fees\*

- **3,200 USD**  
*\*VAT is Excluded If Applicable*

## المقدمة

تم تصميم هذا البرنامج التدريبي الذي يستغرق خمسة أيام لتزويد المشاركين بخلفية علمية وعملية شاملة حول إدارة العقود والإشراف على أعمال تنفيذ المشاريع الهندسية. وقد تم تصميم منهجية التدريب لهذا البرنامج من خلال زيارات ميدانية لمشاريع هندسية حديثة.

يحتل الإشراف على أعمال تنفيذ المشاريع مكانة بارزة في إدارة المشاريع الهندسية لما له من دور فاعل ومهم في نجاح المشروع. فالإشراف هو الضابط لضمان التنفيذ طبقاً لوثائق العقد بما يتماشى مع أهداف المشروع، كما أنه الرقيب لعملية ترجمة المشروع من مواصفات ورسومات إلى واقع محسوس ماثل للعيان ينتفع به، وبالتالي يحقق الغرض الذي أنشئ من أجله. إن غياب الإشراف أو القصور في أدائه يقود إلى كثرة الاجتهادات وقد يكون أحياناً عدم المبالاة مما يؤدي إلى نتائج وخيمة لا تحمد عقباه. مما يستوجب الإدراك بأهميته لدى كافة القائمين عليه والمرتبطين به في المشروع. وليس أدل على هذا من حقيقة أن الإدارات الهندسية في الجهات المعنية لا تكاد تخلو من إدارة عامة بمسمى "الإشراف على التنفيذ / تنفيذ المشاريع".

## الاهداف

تهدف هذه الدورة إلى التعريف بأسس مهنة الإشراف على أعمال تنفيذ المشاريع للعاملين بقطاع التشييد وبالأخص للمهندسين العاملين في الجهات الحكومية الإشرافية على التنفيذ والعاملين بالمكاتب الاستشارية وبشركات المقاولات الخاصة والعامة وشركات إنتاج وتسويق مواد البناء ونظم الإنشاء والتجهيزات وكذلك المهندسين المهتمين والراغبين في ممارسة هذه المهنة. كما تهدف الدورة أيضاً إلى الارتقاء بمهنة الإشراف على أعمال تنفيذ المشاريع لدى الجهة المالكة وذلك باستخدام الأساليب الحديثة في الإدارة والمتابعة والتنفيذ والإلمام بأهم المفاهيم العملية والعلمية للإشراف على تنفيذ المشاريع بما يشمل ذلك من مراحل حياة المشروع المتعددة من مجموعة المهام التالية:

- المهام الأولى: مقدمة عامة عن واقع الإشراف على المشاريع
- المهام الثانية: إدارة العقود للمشاريع والمهام القانونية
- المهام الثالثة: المهام الإدارية
- المهام الرابعة: المهام المالية
- المهام الخامسة: المهام الهندسية

## الحضور

المسؤولون عن أعمال تنفيذ المشاريع من مهندسين ومراقبين ومشرفين فنيين بكافة تخصصاتهم المختلفة.