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بروجاكس للتدريب والتطوير  
Projacs Training and Development

# Sustainability in Engineering

29 September - 3 October 2019

Dubai / UAE

A Member of:



PROJACS ACADEMY



[ProjacsAcademy.com](http://ProjacsAcademy.com)



## Introduction

**“Sustainability Design Engineers** are working intently on designing buildings that reduce usage of natural resources. Designing buildings in ways that reduce energy consumption, water consumption, and refrain from generating an excessive use of fossil fuels.” ... Increasing the market value of building. The good understanding of the sustainability in engineering and Environmental Impact Assessment together with the obeyed techniques are very essential topics to be discussed especially with great emphasis the procedures, the standards and the methods that are used for true implementation. Implementing sustainability in engineering will be the core of this course.

## Objectives

**By the end of this course practitioners shall learn to:**

- The sustainability issues and its relation to future developments
- The EIA principles
- Waste management techniques
- Environmental awareness
- Sustainability and business development

## Who Should Attend?

The course is of interest for business developers - Development engineers – Planners- Waste management personnel – Environmental supervisors.

## Course Outline

### DAY 1:

- Introduction to sustainability
- Main concepts of sustainability
- Sustainability in Engineering
- All types of engineering sustainability
- Sustainability and the environment

- EIA principles
- How to implement EIA

## DAY 2:

- Introduction to waste management
- Environmental Awareness
- Principles of waste minimization.
- Waste management techniques
- Recycling processes
- Methods of waste management and
- New technology in environmental concerns
- Documentation and reporting procedures

## DAY 3:

- Audits and check lists, including internal, external and third party audits
- Environmental awareness and community involvements and right to know act
- Environmental polices
- Implementing an environmental policy.
- Rules and standards
- What is requested from engineering companies
- What is requested from engineering personnel
- Case studies

## DAY 4:

- A brief about ISO 14001
- OHSAS standards
- Renewable energy usages
- Wind power and associated activities
- Solar energy utilization and associated activities
- Bio mass and bio fuel as a source of power case studies

## DAY 5:

- Energy management policies in engineering
- Energy storage
- Use of unused resources
- Engineering management techniques
- Sustainability and man kind
- Cost reduction and budget impact
- Continuous improvement polices
- Sustainability and development of strategies
- Case studies

### 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 binder containing a copy of the presentation
- slides and handouts
- Post-assessment

### Program Support

This program is supported by interactive discussions, role-play, and 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\*

- **3,500USD**  
*\*VAT is Excluded If Applicable*