



**Asia Masters Center**

## **Dynamic Analysis For Re Structures Under Dynamic Loading In Petroleum Industry**



## Dynamic Analysis For Re Structures Under Dynamic Loading In Petroleum Industry

### ➔ Course Objective

- Develop basic competence in the use of available engineering methods for calculating blast loads and dynamic structural response.
- Systems (shear walls and frames), non-structural components (doors and windows)
- Familiarize participants with the issues, standards, and procedures used to design structures that resist blast loads.
- Provide an overview of the design approach used for typical construction materials (steel, concrete, masonry),
- Provide participants with in-depth knowledge of the principles of dynamic analysis.

### ➔ Target Audience

- Engineering
- Junior, senior and lead civil and structural engineering
- Project engineers



## Course Outline

### Day 1

- Design Management process
- Control the design of the industrial projects
- Define the load on the industrial structure
- BS and ACI code in design of concrete
- The dynamic loads behavior

### Day 2

- Foundation design principal
- Design foundation under power turbine
- Design of foundation under reciprocating equipment
- Reason for blast load
- Blast load effect and calculation
- Pressure Vs time Characteristic
- Load combination with blast load

### Day 3

- Joints ductility / response to blast loads
- Special detailing of Blast Resistant structures
- Fragment impact, positive/negative phase duration.
- Behavior of structural members / damages forecast .
- Progressive collapse Dynamic material strength
- Materials and structure element type.
- Dynamic materials

### Day 4

- Deformation limits
- Dynamic increase factor

- Elastic , Elasto-Plastic & Plastic deformation due to blast loads
- Inspection and maintenance plan
- Dynamic analysis method
- Design procedure
- SDOF procedure
- MDOF procedure
- Typical detail for the connection
- Upgrade existing building
- Workshop for case study concrete structure

### **Day 5**

- Upgrade existing building to blast resistance.
- Evaluation of existing structure.
- Construction precaution to achieve design requirement

### **➤ The Feature Of Asia Master Training And Development Center**

- we pick up the customer from the airport to the hotel.
- we give the participant training bag includes all the necessary tools for the course.
- Working within groups to achieve the best results.
- All our courses are confirmed and we do not postpone or cancel the courses regardless of the number of participants in the course.
- We can assist you in booking hotels at discounted prices if you wish to book through us.
- We offer the certificate from Asia Masters Center for Training and Administrative Development.

➔ **The Cost Of The Training Program Includes The Following:**

- 1) Scientific article on flash memory.
- 2) Training Room.
- 3) Training.
- 4) Coffee break.
- 5) The training bag includes all the tools for the course.

**Price (USD)**

**Communicate with the training department  
to know the participation fees**

➤ **There are offers and discounts for groups**

**The details of the bank account**

**Bank name: CIMB Bank Berhad**

**Account name: Asia Masters Center SDN. BHD**

**Bank account number: 80-0733590-5**

**Swift code: CIBBMYKL**

**IBAN: Null**