

Concrete Structures Design





Concrete Structures Design



Course Objective

- ➤ Understand quality assurance methods for concrete
- ➤ Understand the basics of quality concrete construction
- Fully utilize the latest technology in concrete materials and construction methods
- > Recognize and solve potential problems with concrete construction
- > Provide design details to minimize concrete deterioration
- > Develop project specifications to improve concrete durability
- ➤ Reduce potential conflicts in specifications

Target Audience

Engineers who design concrete structures exposed to harsh environments such as bridges, roadways, plazas, parking structures, marine structures or any building with exposed concrete.





Course Outline

Day 1

Concrete in Extreme Conditions

- > Freeze-Thaw
- ➤ Chemical Attack
- ➤ Marine Environments
- ➤ Abrasion and Erosion
- ➤ High Strength Concrete
- ➤ Self-Consolidating Concrete
- ➤ Mass Concrete
- ➤ Roller-compacted Concrete
- > Pervious Concrete
- ➤ Ultra-thin Whitetopping

Day 2

Design Details to Reduce Corrosion

- Crack Control
- ➤ Concrete Cover
- ➤ Materials and Mix Design
- > Characteristics
- ➤ Membranes and sealers
- > Cathodic Protection

Day 3

Fundamentals of Quality Concrete

➤ Materials



- ➤ Batching and Delivery
- ➤ Quality Control and Quality Assurance

Day 4

Construction Methods

- ➤ Handling and Placing Concrete
- > Finishing and Curing Concrete
- ➤ Hot and Cold Weather Concrete
- ➤ Construction Scheduling
- Specifying Concrete for High Performance
- > Prescriptive versus

Day 5

Performance-based Specifications

- > Performance Criteria
- > Construction Execution
- ➤ Pre-qualification Testing
- ➤ Acceptance Testing
- ➤ Troubleshooting Concrete Failures
- ➤ Plastic Concrete
- Hardened Concrete

> 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

