



المركز العالمي للتدريب والتطوير
International Centre For Training & Development



CC080 SURVEYING



ACTVET
Abu Dhabi Centre for
Technical and Vocational
Education and Training
مركز أبوظبي
للتعليم والتدريب
التقني والمهني

GInI GLOBAL
INNOVATION
INSTITUTE
Authorized Innovation Provider*

**Project
Management
Institute**
Registered
Education
Provider



International Association
for Health and Occupational Safety
and the Environment

EFQM
Member



Course Introduction:

This course introduces the three basic surveying tools—the tape, level and transit/theodolite along with proper field procedures for basic surveying. These include taking field notes, taping and EDM, leveling, bearings and azimuths, topography, and mapping. This is an introductory course to the principles of surveying as related to the construction industry and introduces the delegates to the equipment, methods and calculations used in land surveying. The delegates will also study the various types of instrument along with the ability to interpret and record data from the various types of surveys and survey drawings.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- Discuss the principles of surveying and the use of basic surveying tools
- Apply geometric and trigonometric principles to basic surveying calculations
- Use accurate and prepare legible and complete notes in a well-prepared field book
- Demonstrate field procedures in basic types of surveys
- Practice awareness of the limitations of the basic surveying instruments and analyze the possible errors that could arise
- Apply drawing techniques in the development of a topographic map

Who Should Attend?

This course is intended for civil, mechanical and electrical engineers, estimators, cost engineers, project managers and contract administrators. This course is also beneficial for contractor-owners, architects, engineering degree holders and for entry-level and practicing engineers desiring to pursue rewarding careers in land surveying.

Course Outline:

Day 1:

- Introduction to Taping and Pacing
- Breaking Chain (Traverse)
- Demonstration of EDM

Day 2:

- Introduction to Leveling
- Differential Leveling
- Profile Leveling (Sewer Line)

Day 3:

- Laser Leveling
- Introduction to Theodolite & Transit (Right Angles and Double Centering)
- Transit Traverse (Double Direct Angles)

Day 4:

- Vertical Angles (Heights of TV Tower)
- Introduction to Radial Traverse for Topographic Map (MCCC)

Day 5:

- Map Data
- Topographic Map

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

