Sloping, Benching, Embankments and Bundwalls Course

Venue Information

Venue: London UK

Place:

Start Date: 2026-06-23

End Date: 2026-06-27

Course Details

Net Fee: £4750.00

Duration: 1 Week

Category ID: CACETC

Course Code: CACETC-50

Syllabus

Course Syllabus

Course Description

This course provides guidance for analyzing the static stability of slopes of earth and rock-fill dams, slopes of other types of embankments, excavated slopes, and natural slopes in soil and soft rock. Methods for analysis of slope stability are described and are illustrated by examples and case studies. Criteria are presented for strength tests, analysis conditions, and factors of safety. The methods of stability analysis discussed in this course satisfy all conditions of equilibrium

After participating in this course, you will be able to:

- Identify key issues associated with a specific slope stability problem
- Obtain parameters required for slope stability analysis of the site

Course Objective

- To introduce the basic concept of limit equilibrium in static and quasi-static slope stability analyses
- To explain common methods of slope stability analysis, computer software and design charts
- To discuss design considerations for embankments, excavations and other man-made slopes
- To analyze stability of natural slopes in soils and soft rocks
- To outline technologies for slope stabilization
- To practise slope stability analysis and design calculations via exercises and case studies

Course Outline

Introduction

- Purpose and scope
- Basic design considerations
- Theory of stability analysis
- Design procedure
- Modes of slope failure

Design Considerations

- Introduction
- Loading conditions
- During construction and at the end of construction
- Steady-state seepage conditions
- Sudden drawdown stability
- Stability during earthquakes

Design Criteria

- General
- New embankment dams
- Existing embankment dams
- Other slopes

Calculations and Presentations

- Analysis methods
- Verification of computer analyses and results
- Presentation of the analysis and results