

Geotechnical Engineering & Soil Stabilization

COURSE OVERVIEW

This advanced course provides comprehensive coverage of soil behavior analysis and ground improvement techniques essential for modern construction projects. The curriculum addresses challenging ground conditions and sustainable solutions for infrastructure development. Participants will explore both theoretical principles and practical applications of soil stabilization, investigating mechanical, chemical, and biological methods to enhance soil properties for various engineering applications.

WHO SHOULD ATTEND?

This course is essential for geotechnical engineers, civil design engineers, project managers, and site construction professionals involved in foundation design, slope stability analysis, and ground improvement projects who are responsible for ensuring structural safety and managing soil-related risks in infrastructure development.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Conduct advanced site investigation and soil characterization for stabilization projects.
- Analyze slope stability and implement appropriate stabilization measures.
- Design and specify ground improvement techniques for weak soil conditions.
- Evaluate the effectiveness of various soil stabilization methods.
- Develop comprehensive soil stabilization plans for infrastructure projects.
- Integrate sustainable practices in geotechnical engineering solutions.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Soil behavior analysis and site characterization techniques.
- Mechanical stabilization methods and earth reinforcement.
- Chemical stabilization using binders and additives.
- Ground improvement systems for foundation support.
- Slope stabilization and erosion control methods.
- Monitoring and quality control of stabilization works.
- Sustainable geotechnical solutions and environmental considerations.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded