Techniques For Pavement Rehabilitation Course

Venue Information

Venue: London UK

Place:

Start Date: 2026-09-01

End Date: 2026-09-05

Course Details

Net Fee: £4750.00

Duration: 1 Week

Category ID: CACETC

Course Code: CACETC-56

Syllabus

Course Syllabus

Course Description

This course covers the essential elements of mechanistic pavement analysis and design, with an emphasis on the implementation of concepts in practical design situations. After completion of the course, candidates should be updated with the latest technology in the field of pavement design.

Course Objective

The course addresses all aspects of asphalt technology, successfully implemented roadway pavement structural design, hot mix design, maintenance and rehabilitation. The course details Superpave system for selecting materials and designing asphalt mixtures to meet climate and traffic conditions of specific roadway paving projects. Also it highlights the pavement management system and asset management. The course provides tremendous exposure to the North American experience and technology for all sectors involved in design, construction and quality control.

- Subgrade Soil Classification and Drainage/ Participant Interaction with problem solving and examples
- Flexible Pavement Structural Design Using AASHTO Method
- Rigid Pavement Structural Design Using AASHTO Method and the Canadian Portland cement Association
- Using Darwin Software for Flexible Pavement Design/ Participant Interaction with applicable examples
- Using Portland cement Association for Concrete Pavement Design PCA software/Participant Interaction with applicable examples

Hot Mix Design

- Physical Characteristic of Aggregates and Asphalt Cement
- Sampling, Sample Identification and Sample Preparation
- Extraction of Asphalt Concrete for Testing
- Sieve Analysis
- Types of Hot Mixes and Methods of Mix Design
- Marshall Mix Design// Participant Interaction with problem solving and examples
- Pavement Construction and Pavement Recycling
- Cold in Place Recycle Technology
- Emulsions

Superpave Asphalt Volumetric Mix Design (State-Of-The-Art)

- Terminology, Equipment Used
- Mix Design
- Selection of Materials
- Determination of a Design Aggregate Structure
- Determine Of Design Asphalt Binder Content
- Type of Superpave Mixes
- RAP in Superpave Mixes
- Superpave Mix Design/ Participant Interaction with problem solving and examples

Pavement Management System (PMS)

- Concept of PMS
- Pavement Management Levels and Functions
- Pavement Performance
- Serviceability
- Roughness Evaluation, Structural Capacity Evaluation, Condition Survey for Surface Defects and Distress, Skid Resistance
- Life Cycle Cost Analysis/ Participant Interaction with problem solving and examples
- Determination of Present and Future Needs, and Priority Programming of Rehabilitation and Maintenance
- Perpetual Pavements

Perpetual Pavements

- Foamed Asphalt