MOVA Design, Specification and Validation
Monday 18th July 2022
JCT Offices, Lincoln

jct consultancy

Duration: 3 days
Price: £950 (exc. VAT)

Overview

This course is designed for Traffic Signal Professionals involved in the design of Traffic Signal Installations which use Microprocessor Optimised Vehicle Actuation (MOVA) to optimise traffic signal timings. The course begins with basic theory of MOVA but moves quickly onto the practical application of MOVA including specifying detectors, building Datasets and using MOVA Tools. Configuring MOVA outstations and integrating MOVA with SCOOT are also covered. The course has a lectured format with workshops to consolidate the learning and comprehensive notes and training materials are provided.

Who Should Attend

Attendees should have a good basic understanding of UK traffic signals including Phases, Stages, Intergreens and Interstages. These topics are covered on other JCT courses such as "An Introduction to Traffic Signals". Whilst it is not imperative to have extensive site experience attendees should have at least a very basic understanding of the components of a Traffic Signal Installation including the structure of Controllers, Detector Loops and Out Station Transmission Units.

Pre-requisites

Understanding of UK Phases, Stages, Intergreens and Interstages, basic understanding of Traffic Signal Installations

Course Content

The following topics are covered:

Introduction to MOVA: Basic theory of MOVA operation, Benefits of MOVA, Estimating MOVA modelling the benefits

MOVA Design: Types of MOVA detectors, locations and uses, Alternatives to loops for MOVA detectors, Options for right turn control under MOVA, Staging a junction for MOVA

Controller Specification: Writing relevant pages of ITS1827 to specify MOVA interface including UTC Interface, Phase Confirms and Detectors, Special Conditions

Workshop Exercises ? Design and Specification: Setting out of detectors on a plan, considering road speeds and how to control right turns. Creating appropriate stages, a stage order and specify the MOVA Interface.

Structure of a MOVA Dataset: Explanation of the basic structure of a MOVA dataset, consisting of links, lanes, detectors and stages, and the definition of each.

MOVA Tools: Working through MOVA Tools, page-by-page, looking at the structure and parameters for Controllers, Signals, Matrices, Links, Lanes, Detectors, SD Codes

Workshop Exercises - Dataset: Writing the relevant controller specification forms and configuring a MOVA Dataset for the site designed in the prior workshop.

MOVA Versions and Hardware: Versions and facilities, Integral platforms, Non-integral Outstations

Communicate and Configure MOVA Outstations: Connecting and

communicating, Basic configurations, Uploading and downloading datasets

Integrating MOVA with SCOOT: Configuring and controlling MOVA on a SCOOT Site, using UG405 and basic commands.

Validating MOVA Operation: Principles of why and how MOVA is validated, understanding: Troubleshooting common errors and problems, Key validation parameters and what to check, Signs of a well performing MOVA Site

Basic MOVA Linking: Summarising the basic techniques to link MOVA Streams or sites, including: Theory and practical applications of linking, Examples of Special Conditions, Passing Links between stages and streams

Accreditation

All JCT courses are Approved or are pending Approval by the Institute of Highway Engineers and attendance is therefore recognised by the IHE and many other bodies as evidence of Continual Professional Development (CPD).

Courses are managed under a ISO9001 Quality Management System.

Dates & Times

This course will run from Monday 18th July 2022 and last for 3 days.

The following schedule should apply although all times are provisional and subject to change as required on the day:

Day 1: 09:00 - 17:00.

Day 2: 09:00 - 17:00.

Day 3: 09:00 - 17:00.

Course Venue

Venue: JCT Offices, Lincoln

Location: Lincoln

Venue website: www.jctconsultancy.co.uk

Address of venue: JCT Consultancy Ltd.
LinSig House
Deepdale Enterprise Park
Nettleham
Lincoln

Venue postcode: LN2 2LL

How to get there:
Office Directions by Road:

Description of venue:
New purpose built offices and training facility, just off the A46, 2 miles to the NE of Lincoln.

Course Tutors

Depending upon scheduling constraints, our course tutors will sometimes split tuition between them or teach a given course in its entirety whilst the other is unavailable. Please contact us directly if you need more specific detail about who will be teaching a specific course.

Course tutor: Chris Kennett MIHE