# LinSig 3.1 Upgrade Computer Workshop

Tuesday 13th March 2012

Space@119 - The Chartered Institution of Highways & Trans

Duration: 1 day

Price: £295 (exc. VAT)

### **Overview**

This computer based upgrade course is suitable for anyone who has previously used Versions 2 & 3 of LinSig and would like to be introduced to the significant enhancements in LinSig3.1.

## Who Should Attend

This computer based upgrade course is suitable for anyone who has previously used Versions 2 & 3 of LinSig and would like to be introduced to the significant enhancements in LinSig3.1

# **Pre-requisites**

The course will assume that delegates have a good understanding of LinSig and at least limited exposure to version 3 (although a short introduction will point out the major differences between versions 2 & 3).

### **Course Content**

LinSig is a comprehensive design and modelling package for traffic signal junctions either individually or in a network of junctions. LinSig has been used throughout the UK since the mid 1980s and has consistently been the most widely used signal design software in the UK for over 20 years. Over this period LinSig has been extensively developed to stay at the forefront of traffic signal modelling.

LinSig3 took the LinSig modelling of networks to a new high offering multiple signal controller modelling, traffic assignment, matrix estimation and the ability to combine single junction files into a single network. For junction modelling there is an improved facility for modelling short lanes, filters and right turns including the ability to model pedestrians giving pedestrian delays.

LinSig3.1 is a major enhancement to LinSig3 with significant new features including:

- Flow definition system allowing flows to be entered either in an Origin Destination format or in a lane based format, with the ability to match fixed and assigned flows on the same or different routes; Layered lane flows? allowing traffic to be disaggregated by type, route etc, this is a particularly powerful way of modelling bus lanes; Graphical consistency checking? visual method of identifying flow mis-matches
- Multiple cycle times ? for the first time LinSig introduces the ability to build networks with multiple cycle times this will prove particularly useful in modelling multi SCOOT region networks
- Improved bus modelling? in routed network regions separate Bus Zones can now be used to disaggregate buses or layers defined uniquely for bus use, bus speeds can then be separately defined as can bus dwell times.
- Bonus greens ? each lane in LinSig3.1 can have its effective green trime adjusted independently using a new bonus green facility. This will give modellers the



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- ability to adjust for localised behaviour such as red running or under utilised green
- Turning count view and entry? a new dynamic turning count view allows modellers to examine and to enter turning counts across a network in a manner consistent with turning counts often produced for TAs.
- Optimisation improvements ? users now have the ability to perform offset only optimisation and to limit degrees of saturation
- Multi lanes ? lanes can now be given multiple saturation flows to allow groups of lanes to be modelled as a single entity
- Multiple intergreen sets? modellers can now define up to three intergreen sets allowing simple sensitivity testing for variable intergreens such as those associated with Speed Discrimination and Puffins
- TranEd 2 file importing ? Traned 2 files can now be seamlessly ported into LinSig3.1
- Model auditing? as aprt of a request from Transport for London LinSig has a major new feature to assist the new LinSig Model Audit Process (LMAP). The view brings together a range of input and output data in a single place and allows individual models to be compared highlighting the differences.

Whilst many LinSig3 users will attempt to learn LinSig3.1 by reading the software documentation, or even trial and error, the upgrade course allows the rationale behind many of the new features to be explained, best practice to be learnt and questions to be answered. The course is a computer based workshop giving delegates hands on experience with the new features, it will however run at a swift pace and so is not for the novice LinSig modeller. Those with less experience should consider the full three day ?LinSig3.1 computer workshop?.

## Course Topics:

The course will cover the following topics:

- LinSig3 main features: Multiple views, arms, lanes, connectors, short lanes & blocking, zones, routes & traffic flows, traffic assignment, matrix estimation, controllers, pedestrian links
- Linsig3.1 new features including: Flow definition system, layered lane flows, consistency checking, multiple cycle times, bus modelling, bonus greens, turning count view, multi lanes, multiple intergreen sets
- Workshop 1: Putting into practice some of the new features including flow layers, bus modelling and multi cycle times
- Larger networks: Applications, network structures, combining linsig models, flow matching, internal zones, network control plans, delay based assignment and iterative assignment
- Workshop 2: Stitching together of individual LinSig models, making necessary alterations, entering turning counts and estimating a matrix
- Model auditing : Demonstration of audit view and file comparator

### Accreditation

The number of CET days will be allocated by the supervising civil engineer of each attendee. The course duration is one day. The course has an IHE accreditation of one day.



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# **Dates & Times**

This course will run from Tuesday 13th March 2012 and last for 1 day.

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

Day 1: 09.15 - 17.00.

## **Course Venue**

Venue: Space@119 - The Chartered Institution of Highways & Transportation,

London

Location: London

Venue website: www.ciht.org.uk/en/about-us/services/spaceat119/index.cfm

Address of venue: The Chartered Institution of Highways & Transportation, 119

Britannia Walk, London Venue postcode: N1 7JE

How to get there:

BY TUBE: the local London Underground station is Old Street

# **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: John Nightingale MSc(Eng), CEng FIHE MCIHT

The information presented here is kept as accurate and up to date as possible, nevertheless, this document is static and cannot be updated if any changes to the course arrangements are made. We make every effort to inform our delegates if we have to make any cancellations and if any changes are made to the venue or schedule. We also advise all delegates to check the website or contact us directly to confirm course details a few days before the course starts.



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