

# LinSig3 Signalled Roundabout Design

Duration: 1 day

## Overview

The course is aimed at all those involved in the geometric design, traffic modelling and signal optimisation of signalled roundabouts. Using a number of specialist techniques, LinSig can streamline the whole design process compared with traditional methods.

## Pre-requisites

Delegates require a good understanding and hands-on experience of LinSig modelling of stand-alone junctions. This may have been gained by attending a LinSig computer workshop, or from equivalent experience in the work place.

## Course Content

The geometric design of signalled roundabouts requires a rigorous process of lane flow analysis to identify combinations of lanes and spirals which will work properly from the outset. Traffic modelling is then used to optimise signal timings for coordination and capacity, and to predict overall performance. With the use of LinSig3, both processes are combined within the modelling using iterative methods to give rapid results. Much of the course time is spent working on computers to instil confidence in these methods.

- The rationale for signalling roundabouts with reference to entry capacity, signalling efficiency, background material and current guidance.
- Overall LinSig process with a demonstration template example. Approximate signal capacity from lane flows and retention of give-way entries to maximise efficiency.
- Workshop exercises in the manipulation of numbers of lanes and connectors to achieve satisfactory lane flows for signal control and selected give-way entries.
- Interactive optimisation of signal timings to minimise queues at circulating stop lines and maximise capacity. Use of cyclic profile and uniform queue graphs.
- Workshop exercises using timing dials in a logical sequence to set green splits and offsets to maximise coordination and capacity.
- A design project using the above techniques to develop a signalled roundabout LinSig model and layout as a replacement for a non-roundabout junction.

## 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.

## Additional Information

The course will be delivered by a combination of a conference call and virtual computerlab. Delegates do not need to have LinSig installed as LinSig will be accessed via a browser.

*The information presented here is kept as accurate and up to date as possible, nevertheless, course arrangements are sometimes changed and we advise all delegates to check the website or contact us directly to confirm course details a few days before courses start. All course prices include tuition, lunch and refreshments, however, accommodation is excluded from course prices except where indicated. All prices exclude VAT, GST, or other sales tax as applicable.*



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