

# Traffic Signal Design

Duration: 4 days

## Scheduled Courses

- Birmingham - Conference Aston, from 10th November 2026, £2050

## Overview

This four day course covers all the key aspects of the design of Permanent Traffic Signal Design and is structured to equip attendees the skills and knowledge they need to take a design from concept to deployment. Along with comprehensive lectures and course materials there are structured exercises throughout allowing attendees to learn by doing. Comprehensive course notes and training materials are supplied along with access to training laptops with all associated software.

## Who Should Attend

Anyone who is already involved with Traffic Signal Design, who would like to consolidate and expand their experience.

## Pre-requisites

The course requires a degree of prior knowledge including a reasonable understanding of Phases, Stages, Intergreens and calculation methodologies leading to Degree of Saturation and Practical Reserve Capacity. These topics are comprehensively covered on the JCT Introduction to Traffic Signals and Basic Introduction to Traffic Signals courses. The course also makes use of LinSig software, so ideally attendees will have at least basic skills with LinSig. For any attendees who do not have basic signals knowledge and/or are not familiar with the LinSig software a free, one day online refresher training course will be offered in advance of the Traffic Signal Design course.

## Course Content

This is a four day course delivered jointly by Chris Kennett Consulting Limited and JCT Consultancy Ltd.

The course content includes the following:

- Fundamental Principles of Traffic Signal Design
- Overview of TOPAS Standards & Controller Specification Forms
- Assessing and Managing Risk in Design, referencing CDM 2015
- Concept Design
- Basic Layouts and Geometry
- Pedestrian Crossing layouts and facilities
- Active Travel Infrastructure Design, referencing LTN 1/20
- Adaptive Control including an overview of MOVA and SCOOT
- Controller Logic
- High Speed Roads
- Shuttle Working
- Hardware, including Passive Safety
- Designing to meet visibility requirements
- Designing for Maintenance
- Phase Delays
- Parallel Stage Streaming
- Improving Junction Performance including Event and Time Based Linking and CLF
- Signalled Roundabout Design
- Major Design Project (in Teams)



training  
software  
consultancy

LinSig House,  
Deepdale Enterprise Park,  
Nettleham, Lincoln  
LN2 2LL

tel: +44 (0)1522 751010  
fax +44 (0)1522 751188

e: [courses@jctconsultancy.co.uk](mailto:courses@jctconsultancy.co.uk)  
w: [www.jctconsultancy.co.uk](http://www.jctconsultancy.co.uk)

## Accreditation

As Vocational Training this course is not currently accredited but will in due course be submitted to the Institute of Highway Engineers' Course Approval process.

Courses are managed under a ISO9001 Quality Management System.

*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.*



**training  
software  
consultancy**

**LinSig House,  
Deepdale Enterprise Park,  
Nettleham, Lincoln  
LN2 2LL**

**tel: +44 (0)1522 751010  
fax +44 (0)1522 751188**

**e: [courses@jctconsultancy.co.uk](mailto:courses@jctconsultancy.co.uk)  
w: [www.jctconsultancy.co.uk](http://www.jctconsultancy.co.uk)**