

Interpretation and writing of TOPAS 2500 Controller Specification forms for Transport Modellers and Design Engineers

Tuesday 14th April 2026

Online

Duration: 1 day

Price: £375 (exc. VAT)

Overview

This course is a detailed examination of Controller Specification forms to allow Transport Modellers to extract accurate information for modelling and assist Traffic Signal Design Engineers in preparing Traffic Signal Controller Specifications. It is based on the TOPAS 2500 Specification (formerly TR 2500/TR2210A/MCE0141) for microprocessor traffic controllers.

Using a real world example the course takes delegates through an ITS1827D document considering all the elements which make up a Specification with theory breaks covering Phase Delays, Detection, Controller Logic, UTC, VA, CLF, Call Cancel Loops, Shuttle Working, SDE/SA, Hurry Calls, Priority/Emergency Modes, Pedestrian Linking and Cross Stream Linking.

Who Should Attend

This course will benefit both Transport Modellers and Traffic Signal Design Engineers

Pre-requisites

Prior to attending the course, Delegates should have a basic understanding of traffic signal terminology such as Phases, Stages and Intergreens.

Course Content

- Purpose of the specification. History of the specification and structure of the associated document
- Introduction to the ITS1827D forms and associated spreadsheet
- Working up and interpreting ITS1827D data
- Introduction to the study junction
- Examination of the Forms 1 to 13
- Each form in order with examination of start-up sequence and starting intergreen and a theory break for Phase Delays, Detection and Controller Logic
- Boolean Logic Workshop Exercise
- Using the study junction to work up Boolean Logic for UTC, CLF and VA
- Examination of the Forms 14 to 21
- Each form in order with theory breaks for Call/Cancel Loops, Shuttle Working, SDE/SA and CLF
- Examination of the Forms 22 to 33
- Each form in order with theory breaks for Hurry Calls, Priority/Emergency Modes, Pedestrian and Cross



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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 Tuesday 14th April 2026 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: 09:00 - 17:00.

Course Venue

Venue: Online

Location: Online

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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