

IHIE Professional Certificate in Traffic Signal Control



Training Courses

This leaflet lists commercially available courses which can provide the underpinning knowledge engineers need to be competent in traffic signal control.

Typically the short courses cost £200/£280 per day.
If you know of other courses, please tell us.

Providers

- JCT – www.jctconsultancy.co.uk/CoursesMainDir/JCTCourseDiary.htm (Incorporating Barbara Chard)
- TMS – www.tms-consultancy.co.uk
- SIAS – www.sias.com/sias/s-paramics/training/training.html
- PTRC – www.ptrc-training.co.uk
- TRL – www.trlsoftware.co.uk/index.asp?Section=Support&Item=Dates
- IHIE – <http://www.ihie.org.uk/index3.asp?cat=4&d=2&pageid=822293>
- <http://www.ahead4transport.co.uk> for course listings and on-line training

Further Information

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Traffic Signal Control Training and Courses

Statement of Competence	Foundation Courses	Practitioner Courses
1. Undertake a risk assessment	<u>TMS</u> RA for Road Safety practitioners	
2. Manage health and safety requirements		
3. Determine the need for Traffic Regulation Orders and action their implementation		
4. Apply DfT and other technical advice and guidance	<u>JCT</u> Introduction to Traffic Signals <u>TMS</u> Introduction to TS Design	
5. Identify factors effecting delivery of traffic signals schemes	<u>JCT</u> Introduction to Traffic Signals	
6. Commission and interpret traffic flow survey	<u>PTRC</u> Traffic Survey Techniques	
7. Carry out site and traffic movement inspections		
8. Conduct consultations internally and externally with stakeholders	(<u>TMS</u> Marketing & publicity)	
9. Write a design brief		
10. Prepare tender documents		
11. Conduct or respond to a Stage 2 Safety Audit and Safety Review	<u>IHIE</u> Traffic Signal Control <u>TMS</u> Introduction to RSA	(<u>TMS</u> Introduction to RSA) <u>NTU</u> RS and Accident Reduction <u>PTRC</u> RS Audit
12. Establish and maintain effective communication with various stakeholders (e.g. elected members)		
13. Conduct post-project appraisal		
14. Prepare technical reports associated with traffic signal control		
15. Present and discuss traffic signal control proposals		
16. Contribute to establishing relevant Local Authority policies or apply Local Authority policies		
17. Evaluate the outputs from Linsig or similar type of software and, at practitioner level, model junction using Linsig or similar type of software	<u>JCT</u> Linsig for Windows	<u>JCT</u> Advanced <u>SIA</u> Model development

Statement of Competence	Foundation Courses	Practitioner Courses
18. Evaluate the outputs from Transyt or similar type of software and, at practitioner level, model junctions type of using Transyt or similar type of software		<u>JCT</u> Transyt <u>JCT</u> Transyt and TransEd <u>JCT</u> Advanced Transyt <u>JCT</u> Design/Modelling inclu. Transyt <u>JCT</u> Design/Modelling of signalled roundabouts <u>TRL</u> Transyt, Oscady <u>SIAIS</u> Model Development
19. Plan and manage the implementation of traffic signals schemes	<u>IHIE</u> Traffic Signal Control	
20. Apply quality control and maintain Design File	<u>IHIE</u> Traffic Signal Control	
21. Maintain financial control		
22. Calculate intergreens and explain the different types of phases.	Introduction to Traffic Signals (<u>JCT</u> & <u>PTRC</u> &	<u>JCT</u> Traffic Signal Design (5 days)
23. Design a traffic signals scheme (including facilities for pedestrians or cyclists) to operate in VA and FT mode, plus one other mode e.g. UTC	<u>TMS</u>) <u>JCT</u> Traffic Signal Design	<u>JCT</u> Advanced TS Design <u>JCT</u> Signalised Roundabouts
24. Calculate manually the saturation flows, lost time and Percentage Reserve Capacity	<u>JCT</u> Pedestrian Crossings <u>TMS</u> Introduction to Junction Design	<u>SIAIS</u> Advanced S-Paramics
25. Interpret, evaluate and apply microsimulation outputs		<u>PTRC</u> Microsimulation Applications <u>SIAIS</u> Advanced S-Paramics
26. Evaluate a Traffic Impact Assessment report	<u>TMS</u> Transport Assessments	
27. Prepare controller specification forms (TR 2210A)	<u>JCT</u> TR2210A Forms <u>IHIE</u> Traffic Signal Control	
28. Conduct Factory Acceptance Tests for traffic signal schemes	<u>IHIE</u> Traffic Signal Control	
29. Conduct Site Acceptance Tests for traffic signal schemes and pedestrian crossings, included timing adjustments	<u>IHIE</u> Traffic Signal Control	

Statement of Competence	Foundation Courses	Practitioner Courses
30. Write a system specification for the supply and installation of traffic signal equipment	<u>IHIE</u> Traffic Signal Control	
31. Development or implementation of strategies		
32. Prepare or list the main Terms & Conditions within a maintenance contract	<u>IHIE</u> Traffic Signal Control	
33. Monitor maintenance contract and list KPIs	<u>IHIE</u> Traffic Signal Control	
34. Determine priorities for planned maintenance, updating and replacement of equipment		
35. Calculate CLF, UTC and SCOOT plans		<u>JCT</u> Public Transport priority <u>TRL</u> SCOOT <u>JCT</u> Advanced Traffic Sign Design
36. Assist with operating UTC/SCOOT systems including amending the database or validate SCOOT network		<u>TRL</u> SCOOT
37. Introduce MOVA control, apply fine tuning and adjustment	<u>JCT</u> Introduction to MOVA	<u>JCT</u> Design and implementation of MOVA
38. Link signals on arterial routes		<u>JCT</u> Linked MOVA <u>JCT</u> Advanced Traffic Sign Design
39. Operate a Fault Management Systems		
40. Operate a Remote Monitoring Systems		

Awareness or Knowledge	Foundation Courses	Practitioner Courses
In order to demonstrate these competences, Traffic Signal Engineers should be aware of or know:		
• Relevant legislation		
• Contract law and similar legislation		
• DfT and other technical standards, advice and guidance		
• Health and safety legislation and codes of practice		
• The standard modelling software and their outputs		S ^{IAS} S-Paramics
• How to prepare datasheets	J ^{CT} TR2210A Forms I ^{HIE} Traffic Signal Control	
• Relevant local authority policies		
• Their organisation's financial regulations, procedures and OJEC requirements		
• Methods of control (VA, FT etc)		J ^{CT} Advanced Traffic Sign Design S ^{IAS} Advanced Control Interface
• How detection systems operate		
• How FATs, SATs are conducted	I ^{HIE} Traffic Signal Control	
• Traffic management techniques	T ^{MS} Introduction to Traffic Management	
• Traffic signal theory and application to junction design	J ^{CT} Traffic Signal Design J ^{CT} /T ^{RL} Arcady, Picady	J ^{CT} Advanced
• Electrical safety	I ^{HIE}	