

Introduction to SATURN Training Course – Agenda

Summary: Three-day training course for either new and/or inexperienced users wishing to understand more about SATURN and its practical application.

Day 1

10:00 – 10:30	Registration
10:30 – 12:30	Session 1 – Introduction <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ Introduction to transport modelling ○ Department for Transport's Transport Appraisal Guidance (TAG) ○ Introduction to SATURN • Practical session <ul style="list-style-type: none"> ○ Getting used to SATWIN ○ Running modules such as P1X
12:30 – 13:30	Lunch
13:30 – 17:00	Session 2 – Matrix Building (Part 1) <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ Matrix basics ○ Data sources ○ Introduction to MX ○ Other matrix modules • Practical session <ul style="list-style-type: none"> ○ Creating a UFM from an input file ○ Adding / deleting zones
	Break
	Session 2 – Matrix Building (Part 2) <ul style="list-style-type: none"> • Practical session (continued) <ul style="list-style-type: none"> ○ Factoring ○ Adding and subtracting ○ Stacking and unstacking ○ Checking matrix totals ○ Batch files
	Close

Day 2

<p>9:30 – 12:30</p>	<p>Matrix Building Refresher</p> <p>Session 3 – Understanding SATURN Networks</p> <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ Network structure ○ Important SATURN network concepts ○ Buffer networks - Speed flow curves ○ Simulation networks - Node types and coding fields ○ Centroid connectors - Examining the different options available <hr/> <p>Break</p> <hr/> <p>Session 4 – Building a SATURN Network (Part 1)</p> <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ SATURN network data file introduction ○ Coding of different junction types - Priority, roundabouts and signals ○ All remaining sections of the DAT file ○ Checking a complete network
<p>12:30 – 14:00</p>	<p>Lunch</p>
<p>14:00 – 17:00</p>	<p>Session 4 – Building a SATURN Network (Part 2)</p> <ul style="list-style-type: none"> • Practical session <ul style="list-style-type: none"> ○ Getting used to P1X ○ Building an existing network ○ Converting from simulation to buffer ○ Adding detail to simulation nodes ○ Conversion of a road to two-way ○ Checking a revised network • SatCoder • Working with the DAT file <hr/> <p>Break</p> <hr/> <p>Session 5 – Assignment and Convergence (Part 1)</p> <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ The assignment process ○ Adding in simulation ○ How assignment and simulation work together ○ Convergence guidance and best practice ○ Causes of poor convergence
	<p>Close</p>

Day 3

9:30 – 12:30	<p>Network Building Refresher</p> <p>Session 5 – Assignment and Convergence (Part 2)</p> <ul style="list-style-type: none"> • Practical session <ul style="list-style-type: none"> ○ Running a SATURN assignment ○ Checking the convergence statistics ○ Rerunning with different convergence criteria
	<p>Break</p>
	<p>Session 6 – Model Outputs</p> <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ P1X graphical outputs - Link, turn, node and matrix attributes ○ P1X secondary analysis - Select links and joy rides ○ Other P1X options - Trees, forests, arboretums and cordoning ○ SatView ○ SATLOOK and SATSTAT ○ SATDB • Practical session <ul style="list-style-type: none"> ○ Network summary statistics ○ Displaying flow differences ○ Displaying trees, select links and joy rides
12:30 – 13:30	<p>Lunch</p>
13:30 – 15:00	<p>Session 7 – Extra Tools</p> <ul style="list-style-type: none"> • Theory <ul style="list-style-type: none"> ○ Shortcut batch files ○ SIGOPT and SIGOFF ○ 11.4 & 11.5 updates - Area charging ○ 11.6 updates - Cost files ○ 11.7 updates - New roundabouts and interchanges
	<p>Close</p>