

# ACT Training Course: Simulating with Aimsun Next

All modules are morning sessions: 9:00 - 13:00 (including two 15-min breaks)

## Module 1 10-12 March

### **MORNING 1: Wednesday 10th March 2021**

#### 1. Editing a model

- Geometry, signal plans
- Public transport, traffic demand

### **MORNING 2: Thursday 11th March 2021**

#### 2. Managing scenarios

- Dynamic scenarios, experiments, and replications
- Attribute overrides and geometry configurations

#### 3. Outputs

- Output calculation, time series

### **MORNING 3: Friday 12th March 2021**

#### 3. Outputs

- Thematic maps, scenario comparison

#### 4. Traffic management

- Traffic management actions
- Modelling incidents and mitigation strategies

## Module 2 16-17 March

### **MORNING 4: Tuesday 16th March 2021**

#### 4. Dynamic traffic assignment

- Dynamic traffic assignment overview
- Cost functions
- Stochastic route choice algorithm and parameters
- Dynamic user equilibrium algorithm and parameters
- Analysing path assignment outputs

### **MORNING 5: Wednesday 17th March 2021**

#### 5. Microscopic network loading

- Microscopic vehicle behaviour
- Calibration of microscopic model

## Module 3 25-26 March

### **MORNING 6: Thursday 25th March 2021**

#### 6. Mesoscopic and hybrid network loading

- Mesoscopic vehicle behaviour
- Calibration of a mesoscopic model
- Hybrid microscopic-mesoscopic simulation



**MORNING 7: Thursday 25th March 2021**

7. Macroscopic modelling

- Static traffic assignment
- Traversal demand calculation
- Demand adjustment