

Adaptive Traffic Control Systems (TE-51)

Course Outline

Module 1 (2 hours)

- Classification of Various Traffic Control Systems
- Traffic Responsive Signal Control
- AI Based Signal Timing
- Automated Traffic Signal Performance Measures
- Fundamental Principles of Adaptive Traffic Control
- Current US Market State of the ATCS Deployments
- Introduction to recent NCHRP study

Module 2 (2 hours)

- SCATS – Fundamental Principles
- SCATS – Installation Requirements
- SCATS – Operational Benefits
- Surtrac - Fundamental Principles
- QuicTrac - Fundamental Principles
- ATSPM for Adaptive Systems

Module 3 (2 hours)

- SynchroGreen – Fundamental Principles
- SynchroGreen – Installation Requirements
- SynchroGreen – Operational Benefits
- InSync – Fundamental Principles
- InSync – Installation Requirements
- InSync – Operational Benefits

Module 4 (2 hours)

- SCOOT – Fundamental Principles
- SCOOT – Installation Requirements
- SCOOT – Operational Benefits
- ACS Lite – Fundamental Principles
- ACS Lite – Installation Requirements
- ACS Lite – Operational Benefits