



# TRANSPORTATION NETWORKS AND SMART MOBILITY: Methods and Solutions

AUGUST 2–6, 2021 | Instructor: Moshe Ben-Akiva | [professional.mit.edu/mstn](http://professional.mit.edu/mstn)

*Note: All times are US Eastern Daylight Time. Schedule is subject to change.*

	MONDAY, AUG. 2	TUESDAY, AUG. 3	WEDNESDAY, AUG. 4	THURSDAY, AUG. 5	FRIDAY, AUG. 6
<b>LECTURE 1</b> 9:30–11:00 am	<b>Introduction, Traffic Performance I:</b> Modeling and Simulation Approaches	<b>Demand and User Behavior I:</b> Overview of Discrete Choice Analysis	<b>Traffic Assignment III:</b> Testing Optimization Algorithms	<b>Real-time Systems:</b> Evaluations of Traffic Predictions	<b>Freight Models I:</b> Economic Activity Models
<b>LECTURE 2</b> 11:15 am–12:45 pm	<b>Traffic Performance II:</b> Microscopic and Mesoscopic Traffic Simulation	<b>Demand and User Behavior II:</b> Route and Time-of-Travel Choice	<b>Traffic Assignment IV:</b> Pricing and Travel Time Reliability	<b>Public Transportation Models I:</b> Framework and Low Frequency Services	<b>Freight Models II:</b> Logistics Choices
<b>LECTURE 3</b> 1:45–3:15 pm	<b>Traffic Performance III:</b> Static and Dynamic Network Supply Models	<b>Traffic Assignment I:</b> Framework for Demand/Supply Interactions	<b>Calibration and Validation I:</b> Estimation of Origin to Destination Flows from Counts	<b>Public Transportation Models II:</b> High Frequency Services	<b>Transportation Systems Planning and Design:</b> Modeling and Evaluation
<b>LECTURE 4</b> 3:30–5:00 pm	<b>Case Study I:</b> Future Mobility Sensing and SimMobility	<b>Traffic Assignment II:</b> Equilibrium and Day-to-Day Dynamics	<b>Calibration and Validation II:</b> Estimation of Behavioral Models, Simultaneous Calibration	<b>Case Study II:</b> High-Speed Rail	<b>Conclusion:</b> Questions and Answers
	<b>VIRTUAL RECEPTION</b> 5:15 pm				