PROFESSIONAL EDUCATION

TRANSPORTATION NETWORKS AND SMART MOBILITY: METHODS AND SOLUTIONS

Live Virtual | Lead Instructor: Moshe Ben-Akiva | professional.mit.edu/mstn

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

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
LECTURE 1 **9:30 – 10:45**	**Introduction:** Smart Mobility; Modeling and Simulation	**Demand and User Behavior I:** Overview of Discrete Choice Analysis	**Demand and User Behavior V:** Machine Learning Applications	**Calibration and Validation I:** Estimation of Origin to Destination Flows	**Traffic Management I:** Road and Trip Pricing Models
LECTURE 2 **11:00 – 12:15**	**Traffic Performance I:** Microscopic and Mesoscopic Traffic Simulation	**Demand and User Behavior II:** Route and Time-of-Travel Choice	**Traffic Assignment I:** Equilibrium and Day-to-Day Dynamics	**Calibration and Validation II:** Calibrating Simulation Systems	**Traffic Management II:** Online platform for Smart-Mobility and Congestion Pricing
LECTURE 3 **1:15 – 2:30**	**Traffic Performance II:** Static and Dynamic Network Supply Models	**Demand and User Behavior III:** Demand Generation and Activity-Based Models	**Traffic Assignment II:** DTA Algorithms and Applications	**Public Transportation I:** Framework and Low Frequency Services	**Freight and E-Commerce:** Aggregate and Agent-Based Models
LECTURE 4 **2:45 – 4:00**	**Case Study I:** Analyzing Smart Mobility using *SimMobility*	**Demand and User Behavior IV:** Passenger and Freight Sensing	**Case Study II:** Automated and Connected Vehicles in Mixed Traffic	**Public Transportation II:** High Frequency Services	Mobility of the Future Outlook
Q&A AND SOFTWARE DEMOS **4:15 – 5:00**	**Q&A and Software Demos:** *SimMobility*	**Q&A and Software Demos:** *FMS*	**Q&A and Software Demos**	**Q&A and Software Demos**	**Q&A**
SOCIAL HOURS **5:00 – 6:00**	**Social Hour**			**Social Hour**	