



EPFL MIDDLE EAST

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Here's your opportunity to understand Transportation Modeling for better planning



As transportation systems become increasingly critical to modern life, they get more complex too. The intricate interaction of infrastructure (highways, railways, vehicles, information technology, etc.) and the behavior of the users makes the task of planning and operating them ever so difficult.

This short course introduces disaggregate travel demand models, designed to aid decision makers in better understanding and in forecasting the traveler's behavior. Internationally renowned experts will guide participants through the various topics viz.: survey design & data collection, model specification & techniques and travel demand forecasting with real case studies being analysed.

Executive Education at EPFL Middle East Fall 2011 Short Course Offering

EPFL Middle East short executive courses combine internationally known experts with a multi-disciplinary approach in order to allow professionals of different sectors a state-of-the-art training in their field of competence.

TRANSPORTATION MODELING December 5-7, 2011

Topics Covered :

Introduction to travel demand
Introduction to choice theory
Logit models: two alternatives
Logit models: more than two alternatives

Aggregation and forecasting
Statistical tests
Data collection
Nested logit models



Faculty : Worldwide expert practitioners and researchers with extensive experience in the domain of transportation modeling :

Prof. Maya Abou Zeid holds a PhD in Transportation. She is an Assistant Professor of Civil and Environmental Engineering at the American University of Beirut and a research affiliate of the Intelligent Transportation Systems Program at the Massachusetts Institute of Technology. Her main expertise is in the areas of travel behavior modeling and forecasting, market research, and traffic flow modeling and simulation.

Prof. Michel Bierlaire holds a PhD in Mathematical Sciences. He is associate professor in the School of Architecture, Civil and Environmental Engineering at EPFL, where he became the director of the Transport and Mobility laboratory. Since 2009, he is the director of TraCE, the Transportation Center at EPFL.

His main expertise is in the design, development and applications of models and algorithms for the design, analysis and management of transportation systems. Namely, he has been active in demand modeling (discrete choice models, estimation of origin-destination matrices) and Dynamic Traffic Management Systems.



Participants:

The course is designed for professionals (from industry and public authorities) and academic researchers (professors, researchers, MSc and PhD students), interested in understanding and predicting disaggregate travel demand and individual choices.

Labs:

The participants will use their own laptop computers during the lab sessions. The software as well as the data for the case studies will be provided.

Schedule:

The course will consist in a total of 8 lectures and 3 computer laboratories of 90 minutes each. Each day, class starts at 9:00 and finishes at 17:00. There are two periods in the morning and two in the afternoon. The last period is dedicated to questions and answers, and discussions.

Tuition fee:

AED 3300. Lunches, coffee breaks and teaching material included.

Accommodation & Transportation:

Assistance regarding accommodation and transportation will be provided upon request.

To sign up, enquire about other course offerings or for any further information please contact:
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