

## Course

# Stated Preference Datacollection & Discrete Choice Modelling

<b>Date:</b>	<b>21, 22 &amp; 28 January 2016</b>
<b>Time:</b>	<b>09.45 – 17.00 h.</b>
<b>Location:</b>	<b>See below</b>
<b>Course leaders:</b>	<b>Prof. Harry Timmermans, Soora Rasouli MSc. (EUT), Prof. Caspar Chorus (DUT)</b>
<b>Days:</b>	<b>3</b>
<b>ECTS:</b>	<b>1 (attendance) / 3 (attendance + assignment)</b>
<b>Course fee:</b>	<b>Free for TRAIL/Beta/OML members, others please contact the TRAIL office</b>
<b>Registration:</b>	<b><a href="http://www.rstrail.nl">www.rstrail.nl</a></b>

### General aim

Discrete choice models have played a very important role in transportation modelling for the last 30 years. They are routinely being used to estimate the influence of all sorts of factors on travel (choice) behavior, and to predict mobility patterns and market shares for transport-related services. As such, they are indispensable for the quantitative underpinning of many transport policies and plans. Increasingly, software packages and tools are becoming available which facilitates the use of these models in real applications by scholars, students and practitioners. This course covers i) the basics of discrete choice theory, including specification and estimation issues; ii) its mainstream model, the MNL-model based on Random Utility theory; iii) as well as more advanced models such as Mixed Logit and Random Regret; iv) data collection methods, with a special focus on designing statistically efficient stated preference-experiments.

### Location:

21 & 22 January - TU Eindhoven: Dorgelozaal / Traverse  
28 January - TU Delft: TPM, room B1.300

### Course programme

#### Day one – TU Eindhoven

09.45 – 10.00 hrs.	Welcome	
10:00 - 12:30 hrs.	Stated preference data and choice models	<b>Harry Timmermans Soora Rasouli</b>
12:30 – 13:30 hrs.	Lunch	
13:30 - 16:30 hrs.	Stated preference data and choice models	<b>Harry Timmermans Soora Rasouli</b>
16:30 - 17:00 hrs.	Closure with drinks	

#### Day two – TU Eindhoven

09.45 – 10.00 hrs.	Welcome	
10:00 - 12:30 hrs.	Basic discrete choice models	<b>Harry Timmermans Soora Rasouli</b>
12:30 – 13:30 hrs.	Lunch	
13:30 - 16:30 hrs.	Basic discrete choice models	<b>Harry Timmermans Soora Rasouli</b>
16:30 - 17:00 hrs.	Closure with drinks	

**Day three – TU Delft**

09.45 – 10.00 hrs.	Welcome	
10:00 - 12:30 hrs.	Advanced discrete choice models	<b>Caspar Chorus</b>
12:30 – 13:30 hrs.	Lunch	
13:30 - 16:30 hrs.	Advanced discrete choice models	<b>Caspar Chorus</b>
16:30 - 17:00 hrs.	Closure with drinks	

**Literature/ material**

Hand-outs of the presentations will be given to the participants during lectures.

**ECTS**

Participants of this course will be awarded with 1 ECTS point when they attend all lectures. Two additional ECTS can be earned by completing an assignment after the course. Students are requested to apply discrete choice models to their own research topic. That is, in the context of their own PhD topic they need to develop, run and analyse a Stated Choice experiment. This includes the generation of a relevant experimental design; collecting (or simulating) their own dataset; and applying the various econometric models to the data. The research topic, process and results need to be summarized in a report which is then evaluated by the lecturers (approved or not approved).