



Research School for Transport,  
Infrastructure and Logistics

## Course Discrete Choice Theory & Stated Choice Data Collection

<b>Date:</b>	11 & 18 april (Delft), 1 & 12 May (Eindhoven) 2017
<b>Time:</b>	09.30 – 17.00 h
<b>Location:</b>	Delft: TPM, Instructiezaal G / Eindhoven: Traverse, Dorgelozaal
<b>Course leaders:</b>	Prof. Caspar Chorus (DUT), Prof. Harry Timmermans & Dr. Soora Rasouli (EUT)
<b>ECTS:</b>	1 (attendance) / 3 (attendance + assignment)
<b>Course fee:</b>	Free for TRAIL/Beta/OML members, others please contact the TRAIL office
<b>Registration:</b>	info@rstrail.nl

### General aim

Discrete choice theory has 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

*Discrete Choice Theory: day 1 and 2 – Delft*

The basics of discrete choice theory, including specification and estimation issues; its mainstream model, the Logit-model based on Random Utility theory; as well as more advanced techniques such as Mixed Logit-models and Random Regret theory;

*Stated Choice Datacollection: day 3 and 4 – Eindhoven*

Data collection methods, with a special focus on designing statistically efficient stated choice-experiments.

### Course programme

To be determined.

### 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 (1 for Discrete Choice Theory; 1 for Stated Choice Datacollection) can be earned by completing assignments after the course.

For the Discrete Choice Theory part, the assignment consists of three take-home computer exercises: 1 for the Logit-model, 1 for the Mixed Logit-model, 1 for Random Regret theory.

For Stated Choice experiment, a requested type of experiment needs to be designed for a given choice situation.

**Prerequisite**

Basic knowledge of mathematics and statistics.

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