Head:	Prof. Dr. K.W Axhausen
Topic:	**How effective will the future Zurich bike network be?**
Assistant:	A. Meister
Registration:	www.ivt.ethz.ch/en/studies/downloads/assignments.html#registration

The city of Zürich has published a “Velostrategie 2030” to guide its medium-range investment in cycling infrastructures. The task of this project to assess the impact of this network on the travel behaviour in the city, with a focus on cycling. The work can draw on on-going work on cyclist route choice in Zürich, based on a large-scale GPS tracking study. It will also have to study the impact of possible increases in e-bike ownership.
The thesis can draw on either the ARE national aggregate model or the IVT’s agent-based model. The route choice models in either approach has to be updated to integrate the new route choice results. The increased quality of the routes is likely to increase the bike model share. The thesis will suggest a way to translate the improved quality into relevant changes in the mode choice model. The impact of e-bikes needs to be assessed in a suitable, if simplified form.

The tasks are (depending on final format/group size):

- Familiarization with the chosen model
- Verification and possible updating of the route choice approach in the chosen model
- Definition of the set of scenarios to be tested, especially with regards to the quality of the cycle network, as well as the demand assumptions, e.g., share of bike ownership
- (potentially) Translation of the improved network characteristics into the mode choice model
- (potentially) Impact of e-bike ownership
- Analysis of the assignment results
- Archiving of the model data and results

Links:	https://www.stadt-zuerich.ch/ted/de/index/departement/medien/medienmitteilungen/2021/maerz/210319a.html
Additional remarks:	Group work possible
Minimum credits:	9 ECTS
Recommended lectures:	Transport Planning