

# Advanced Transport Modeling

## - A Blended Learning Course -

Are video lectures a remedy for the lack of teachers in higher education?  
Can international experts enhance programs of study in Africa?  
Are video lectures sustainable learning resources?  
What are the requirements for successful adaption?

### About the Project

- 2019 - Evaluation and adjustment
- 2018 - Implementation of the first blended learning course with international experts of transport modeling
- 2017 - Funding by DAAD, Erasmus exchange (lecturers / students) recording of video lectures
- 2016 - Concept for a blended learning course for civil engineering
- 2015 - Webconferences for PHD students
- 2014 - Cooperation contract
- 2012 - First contact and support for PHD students

### Course Structure

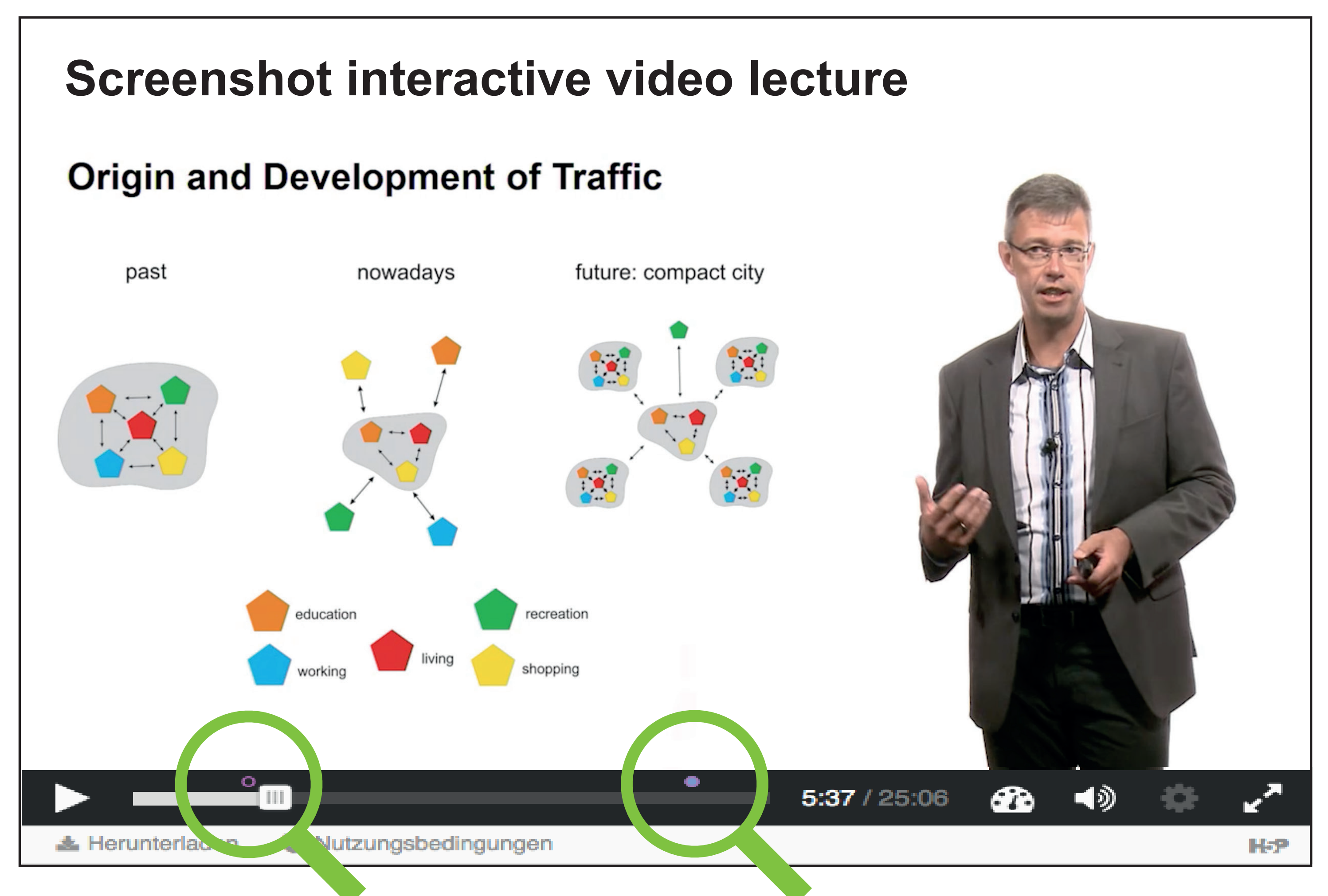
- target group: master students
- blended learning format with weekly sessions
- curriculum integration
- 14 topics by 8 experts
- local lecturer / tutorial support
- weekly assignments
- webconference with experts
- final exam



Photo: Stefan Fries

### Video lectures (interactive)

- screen content variable (lecturer / content)
- interactive videos 8 to 20 minutes long
- singlechoice questions
- retry until the correct answer was given
- video in video (dynamic demonstration)
- play rate adjustable
- optional download
- lectures followed by questions for group discussion



### Moodle - Learning Management System

- Import/Export (exchange)
- Video files should not be stored on moodle
- H5P Plugin for interactive videos
- Student folder
- Assignments

### Open Educational Resources - OER

- production under creative commons licence
- course and videos are reusable
- sharing & cooperation